DOCUMENT RESUME

ED 437 813 EF 005 638

TITLE	Rebuilding Our Schools Brick by Brick.
INSTITUTION	Neighborhood Capital Budget Group, Chicago, IL.
SPONS AGENCY	Joyce Foundation, Chicago, IL.
PUB DATE	1999-11-00
NOTE	158p.
AVAILABLE FROM	Neighborhood Capital Budget Group, 407 S. Dearborn St., Suite 1360, Chicago, IL; Tel: 312-939-7198; Fax: 312-939-7480. For full text: http://www.ncbg.org.
PUB TYPE	Opinion Papers (120) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Case Studies; *Crowding; *Educational Facilities Improvement; Educational Legislation; Elementary Schools; Elementary Secondary Education; Financial Support; High Schools; *Problem Solving; School Construction; *School Expansion
IDENTIFIERS	*Chicago Public Schools IL

ABSTRACT

This report takes the experience of one city--Chicago, Illinois--and uses it as a detailed example of how the struggle to rebuild U.S. schools, particularly a large-scale program, has fared in the real world, highlighting the need for a federal role in helping state and local governments fix its school buildings and relieve overcrowding. Chapter One examines the connection between the quality of school facilities and learning, and how new ideas about school design may improve the quality of education provided to the nation's children. Chapters Two and Three examine Chicago's experience in repairing its school buildings and alleviating overcrowding. Chapter Four and the report's conclusion return to a national perspective to look at the extent of the school building crisis, national enrollment trends, and what state and local governments have been able to do on their own to solve their problems. Chapter Four also includes case studies on how some of the nation's fastest-growing school districts are dealing with the need to fix their schools, and the innovative financing options that have been tried around the country. Concluding comments explore the legislation proposed by the Clinton administration and alternative proposals that are currently being discussed. Appendices contain statistics on Chicago's public school system and a summary of national school construction and repair legislation. Contains 83 references and 40 endnotes. (GR)

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ED 437 813

Rebuilding Our Schools Brick By Brick

November 1999

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Acknowledgements

This report, and NCBG's "Rebuild America's Schools" project,
were made possible through the generous support of the Joyce Foundation.

NCBG also receives support from:

Bank of America
Bank One
John D. and Catherine T. MacArthur Foundation
Wieboldt Foundation
Woods Fund of Chicago
WPWR Channel 50 Foundation

The opinions and findings contained in this report do not necessarily reflect those of the foundations that have provided grants to the Neighborhood Capital Budget Group.

The Neighborhood Capital Budget Group is a decade-old coalition of nearly 200 Chicago community-based organizations representing the residents, businesses, and industries dedicated to improving the quality of life in Chicago neighborhoods through investment in our basic infrastructure. In addition to schools, NCBG encourages direct community participation in setting priorities for the City's public works program, public transit, and economic development programs such as tax increment financing.

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We want to show by this building, with its towering walls and fair proportions, that the dignity of the school is rising in the world. . . . We believe that the existence of our government depends on the education of the people. . . We want the people, as they pass back and forth to ask what public building this is. We want them to understand that this is a noble institution of learning, and that people have wisely expended their money in erecting schoolhouses in preference to erecting jails. . . . It has been the wish of the school officers to make in such an institution that all classes might be induced to send their children to it; they wished to draw the rich as well as the poor within it, so they erected a structure of which the son of a wealthy man need not be ashamed, and that the son of a poor man may feel proud to enter. Here the both are placed on a perfect equality, and the road up the hill of fame is as broad to the humblest child of our ward as it is to the most favored son of the wealthiest citizen.

From the dedication of New York City's Ward School 4
April 23, 1856

Preface

America's classrooms are overcrowded. It's true in cities, it's true in suburbs, and it is true in many of our nation's rural school districts as well. Overcrowding plagues the fast-growing states in the South and West, but it also impacts children in Midwestern cities, across the so-called "Rust Belt," and throughout the Northeast. But is overcrowding a temporary problem, one that will go away by itself if we just have patience? Does it make sense to invest billions of dollars in new school buildings now, or will they be empty a decade down the road?

Certainly, policymakers of the past have tried to argue that school overcrowding is just a blip on the radar screen. In 1949, as birthrates began to soar after World War II, political scientist Newton Edwards tried to warn the public that overcrowding would, over time, go away on its own:

> Educational authorities, now hard pressed to provide adequate building facilities and teaching personnel, should keep in mind that the high birth rates of the 1940's are not likely to persist. . . . Adequate provisions must be made for the education of the abnormally large number of children born during the past decade, but it would be a grave mistake to project the high birth rates of the recent past into the future and to plan accordingly.[1]

A decade later, the Chicago Public Schools were still feeling the sting of ballooning school enrollments, and expecting the number of schoolchildren to continue rising. The 1959 public school bond campaign – the fourth that decade – found CPS struggling to find enough room for both its elementary and high school students, and to locate the dollars needed to modernize and repair aging school buildings:

> For over a dozen years, Chicago has been feeling the effects of an increased birth rate and the impact of population shifts within the city. The influx of newcomers from other parts of the nation, together with our expanding population, has taxed the facilities of the Chicago Public Schools. The increase in elementary and high school enrollment during the past two-year period . . . totaled nearly 26,000, and the trend indicates that by 1964, enrollment will be up another 82,000.

At the same time that CPS officials struggled to get a handle on overcrowding, they were also battling to repair aging and obsolete school buildings. In a 1959 citizens handbook on the pending bond campaign, CPS contended that "consideration will also have to be given to the replacement of older school buildings. Among Chicago Public Schools are 139 buildings or parts of buildings that were constructed before 1901. A few are almost one hundred years old. These obsolete school accommodations still house thousands of children."[2]

Now, 50 years after Newton Edwards predicted that overcrowding would go away on its own, the children of the post-World War II baby boom have school-age children of their own, and the nation's schools are still struggling with overcrowding. Nationwide school enrollments have set record highs for 14 straight years. In Chicago, one-third of elementary schools were overcrowded during the 1998-99 school year, along with 40 percent of high schools. And the situation is only going to get worse. Public school enrollments are expected to continue to increase through 2004, then level off some. After that, experts expect another spike in the nation's birth rate that will send a new wave of students into America's schools.

Even now, there remains some reluctance to invest substantial public revenues in building more and better schools. Some still say overcrowding will go away on its own. But as our elected officials gear up for a national debate over school construction, they should keep history as their guide and not repeat a half-century worth of mistakes.

---

1. Newton Edwards, "Population Change in the United States," *American Academy of Political Science: Current Issues and Trends in American Education*, September 1949, p80.

2. Chicago Board of Education, Chicago School Building Bond Referendum: Guide for Speakers, Discussion Leaders, and Civic Organizations, 1959.

Executive Summary

Every state in the nation – and virtually every town and city – is struggling to repair its aging school buildings. Our country's schoolhouses face a wide range of challenges. Broken windows and leaky roofs. Lead paint and asbestos. Electrical systems that cannot meet the demands of today's need for technology in the classroom. A lack of basic facilities such as gymnasiums, science labs, and lunchrooms. Ancient boilers that no longer keep our children warm, and missing air conditioners in climates where temperatures climb into the 90s even during the school year. In 1995, the U.S. General Accounting Office estimated that U.S. schools had to make $112 billion worth of repairs. Since that time, about $12 billion of those have been completed. That means $100 billion remain to be made.

Overcrowding

Most of those towns and cities also face classrooms that are packed to the rafters. Overcrowding is a serious problem in both cities and their suburbs, in large metropolitan areas and in rural parts of the country. While overcrowding is generally worst in the South and the West, other parts of the country have to suffer their share of packed classrooms. And, according to the U.S. Dept. of Education, the problem is only going to get worse. The children of the unusually large "Baby Boom" generation are now reaching elementary school age, and their rising numbers are expected to make the overcrowding problem even worse. In several years, these children will become high school students, and ground zero for the overcrowding problem will shift to our secondary schools.

> Why invest so much time and money in improving the condition of our school buildings? Because the quality of our schoolhouses has a direct effect on how well our children learn.

Overcrowding means that there are too many students in the classroom for every one teacher. It means that children are forced to learn in places that were never meant to be classrooms – hallways, restrooms, and storage rooms, for example. School districts are looking for quick and inexpensive ways to relieve the problem in their most severely overcrowded buildings, but the long-term solution is hardly cheap. Building new schools is an important but expensive task, and almost every school district is struggling to come up with the necessary funds.

Better Buildings = Better Education

But why should we invest so much time and money in improving the condition of our school buildings when there is so much to be done to improve the quality of education our children receive? There is a growing awareness that the quality of our school facilities has a direct effect on how well our children learn. This connection makes basic sense. Students who are forced to learn in storage closets and restrooms when no other space is available probably won't learn as well as those who attend class in state-of-the-art classrooms. Children who attend schools with leaky roofs, broken windows, and peeling paint probably won't feel the same school pride – or the same pride in their own work – as students who attend brand-new buildings or beautiful historic schools. Similarly, good teachers are less likely to remain at schools where the physical working conditions are poor. Academic research is beginning to confirm this common-sense connection.

The Chicago Experience

This report seeks to take the experience of one city – Chicago, Illinois – and use it as a detailed example of how the struggle to rebuild our schools has played out in the real world. Chicago's school construction and repair program has often been hailed as a national model, and for many reasons it has earned that reputation. Chicago has issued $1.9 billion worth of capital improvement bonds since 1996 and completed over $800 million worth of projects. In just four years, Chicago managed to build six new elementary schools, two high schools, and 43 elementary school additions. Meanwhile, the Chicago Public Schools launched a massive repair campaign designed to stabilize its worst-off buildings and ensure that they did not deteriorate any further.

> Chicago's school construction campaign has often been hailed as a national model. While in many ways it has earned that reputation, it is also a prime example of just how hard it is to sustain such a large-scale building program.

But while Chicago can claim many successes, it is also a prime example of just how hard it is to launch and sustain a large-scale program aimed at rebuilding existing schools and constructing new ones. As Chicago's Capital Improvement Program tackles its fourth year, the stresses and strains of such a massive undertaking are beginning to take their toll. Delays are starting to creep into the list of planned projects, and money is no longer available for some projects that had previously been promised funding. The communities that had dreamed big dreams for their schools are beginning to face the possibility that they may have to scale back their expectations.

The Federal Role

Because so many school districts around the country are in a similar situation, there has been a growing chorus of voices calling for the federal government to do its part to relieve overcrowding and rebuild America's crumbling schools. There has been a flurry of legislation proposed and discussed on Capitol Hill, but so far Congress has not mustered the political will to pass any far-reaching, comprehensive legislation.

This report is intended to make the case that the federal government needs to do what it can to help state and local governments to fix its school buildings and relieve overcrowding. Why should the federal government get involved? Because our schools are a national asset, and the economic, cultural, and social prosperity of our nation depend on a thriving public school system that is open to everyone.

Since states and local school districts are unable to shoulder the financial burden of fixing our schools by themselves, the federal government should fill the gaps for the districts in the most dire financial need and support the efforts of the rest through innovative strategies.

This report has four main sections:

The Nature of Overcrowding

Chapter One examines the connection between the quality of school facilities and learning, as well as how new ideas about school design may improve the quality of education we give our children. It examines several alternatives, such as small schools and community schools, that could improve our public educational system. Finally, the chapter concludes by making a case for community participation in the school design and capital planning process. The collective wisdom of our parents, teachers, and students will not only help make for better schools, but have a lasting positive effect on the system. Parents who take part in the creation of a new school will have a greater stake in its ongoing success. And greater public awareness of the school construction process will help citizens push their elected officials to set appropriate priorities and then follow through on their goals.

The Chicago Experience

Chapters Two and Three look in detail at Chicago's experience in repairing its school buildings and alleviating overcrowding. This state of affairs exists despite the best efforts of a school administration that has received unprecedented financial and political backing from its local mayor. The Chicago Public Schools have been able to tap partnerships and funds from other local taxing bodies, the State, and the limited federal program. Yet the school construction and repair needs far outstrip the available resources.

<u>Please Note:</u> The report is designed so that information on high schools and elementary schools is contained in separate "stand-alone" chapters that can be pulled out and read separately from the rest of the report. In order to accomplish this, some sections (such as data on increasing residential development) is intentionally repeated in each section.

Among the report's most important findings are:

- 41 percent of Chicago's high schools were overcrowded during the 1998-99 school year. That means that 57 percent of all Chicago high school students attended an overcrowded school.

- One-third of all Chicago elementary schools were overcrowded during the 1998-99 school year. That means that 40 percent of all elementary school students attended an overcrowded school building.

- Eliminating overcrowding in Chicago would cost between $1.3 billion and $2 billion even if no more students ever entered the public school system.

- The Chicago Public Schools have been forced to scale back their capital program as costs mount and projects are delayed. Over $400 million in projects was eliminated outright from the Capital Improvement Program this year.

The National Problem/A National Solution

Chapter Four and the Conclusion to this report return to a national perspective to look at the extent of the school building crisis, national enrollment trends, and what state and local governments have been able to do on their own to solve their problems. Chapter Four also includes case studies on how some of the nation's fastest-growing school districts are dealing with the need to fix their schools, as well as innovative financing options that have been tried around the country.

The report concludes with a look at the legislation that has been proposed by the Clinton administration, as well as alternative proposals that are on the table.

Recommendations for Action

States, local governments, and the federal government all have an important role to play in rebuilding America's schools. This final section of the report recommends concrete steps that each level of government can take to speed up the process of improving our nation's schools.

Major Findings

During the 1998-99 school year:

- The number of overcrowded **high schools** in Chicago declined, but overcrowding remained a serious problem. 41 percent of Chicago's high schools were overcrowded, meaning that ***57 percent of secondary school students attended an overcrowded facility***.

- Meanwhile, **elementary school** overcrowding increased over the previous year. One-third of all elementary schools were overcrowded, and 40 percent of elementary students attended an overcrowded school.

New additions are filling up as fast as they are built. In fact, two-thirds of all new additions were overcrowded within two years of construction.

Chicago's school enrollments are expected to increase substantially. About 35,000 additional students are expected to enter Chicago elementary schools by 2004.

To alleviate current levels of overcrowding **Chicago will have to construct seats for another 140,000 students at a cost of $1.3 to $2 billion.**

Currently, 24 of the 29 overcrowded high schools (83 percent) have **no planned capacity additions**, along with 70 of the 152 overcrowded elementary schools (46 percent).

Despite its many accomplishments, **CPS is beginning to feel the financial strain of the school facility crisis.** CPS eliminated $400 million worth of capital projects from its 2000-2004 capital plan, and had to revoke funding from over $400 million more projects for the time being, until more funding can be found.

But Chicago schools aren't the only ones feeling the strain. Overcrowding and school repair is also major a national problem . . .

In 1995, the U.S. General Accounting Office estimated that **fixing America's crumbling schools** (not including solving the overcrowding problem) **would cost $112 billion.** Since then, about $12 billion worth of repairs have been made. Still, that leaves the national repair bill at $100 billion *not counting the need to reduce overcrowding in many districts.*

Nationwide, **public school enrollments have hit record highs for 14 straight years**. The number of school children is expected to continue rising through at least 2004. By then, U.S. public schools will have added another 800,000 students.

Over $17 billion was spent on school construction and repair during 1998, by far the highest total for any time this decade. But **many school districts still cannot afford to pay for their school construction needs**, and much more remains to be done to address overcrowding and rebuild America's schools.

Recommendations for Action

The Chicago Public Schools should . . .
Release to the public a clear estimate of what its construction and repair needs are *at each school*, along with a plan for raising the funds it needs to make these repairs. CPS must also explain to individual schools why some projects have been delayed or eliminated and estimate when they will be completed.

The State of Illinois and Gov. George Ryan should . . .
Expand their commitment to school construction beyond the amount contained in the Illinois FIRST program, and commit state funds to school construction and repair for the long run.

President Clinton and the U.S. Congress should . . .
Act quickly to establish an equitable, effective way to assist local school districts with their school construction and repair needs. Such a program should include direct grants and low-interest loan programs for school districts that are unable to borrow money on their own. While current proposals on Capitol Hill may be a valuable starting point, some school districts are still likely to fall between the cracks.

Chapter One:

Why Care About Our School Buildings?

There is a growing recognition that good school buildings are a vital part of a quality education. This realization is an important educational development because it informs our understanding that the "bricks and mortar" issues of school construction and repair are tied together with the need to improve student performance. This close connection between buildings and learning makes it even more important to adequately fund initiatives to repair older schools and build new classroom capacity. As school districts build these new schools, it is important that they design quality buildings that support modern approaches to teaching ***and*** the needs of the community in which they are located.

Through interaction with parents and community residents, CPS officials have learned that the new construction is having a positive impact in the classroom as well as the community. Bright modernized classrooms help stimulate students' learning process. New schools and additions provide a wholesome and positive atmosphere that promotes an enriching learning environment. New construction is also having a positive impact on the surrounding community. Many school officials have noticed an increase in residents' community spirit and neighborhood pride.[1]

The Chicago Public Schools (CPS) has acknowledged this link between the quality of our school buildings and the quality of the education schools are able to provide. "We realize that we would not make headway educationally unless we also make some changes in terms of the environment in which our students are working and our teachers are teaching," said Dr. Cozette Buckney, chief education officer of the Chicago Public Schools. A March 1999 CPS report on building conditions details the benefits of the school construction program:

This connection makes basic sense. Students who are forced to attend class in storage closets and restrooms because no other space is available probably won't learn as well as those who enjoy state-of-the-art classrooms. Children who attend schools with leaky roofs, broken windows, and peeling paint probably won't feel the same school pride – or the same pride in their own work – as students who attend brand-new buildings or beautiful historic schools. Similarly, good teachers are less likely to remain at schools where the physical working conditions are poor.

> "We realize that we would not make headway educationally unless we also make some changes in terms of the environment in which our students are working and our teachers are teaching."
>
> Cozette Buckney
> Chief Education Officer, Chicago Public Schools

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While the academic research in this area is only beginning to emerge, several studies have confirmed the common-sense notion that better learning environments improve educational performance. One study in Washington, D.C., for example, showed that if a school's condition improved from "poor" to "fair," standardized test scores improved by 5.5 points. Similarly, if the school's condition improved from "poor" to "excellent," test scores rose by 11 percentage points.[2]

A study of the New York City public schools concludes that overcrowding has similarly negative effects on learning:

> The school system's ingenuity in finding a place for every student should not blind us to the effect of overcrowding on student achievement and learning. In New York City the lowest income students in overcrowded schools have lower test scores than their counterparts in other schools. In one instance, there was a four to seven percent difference in the number of students in overcrowded schools passing the Regents Reading Examination and the number of similar students passing in schools that were not overcrowded.[3]

While these studies use standardized test scores as their yardsticks – an increasingly controversial measurement tool among parents and academics alike – other analysts interested in education reform view the overcrowding problem in more human terms. The burden of too many students affects the daily life of a school:

> We already know that smaller classes mean more to marginal students than to other students. We also know that the more dense and overcrowded the classroom, the more teachers and students will revert to habitual teaching techniques and learning patterns. In overcrowded schools, teachers all too often are unable to do anything more than cover the required material, with little time for exploration. Administrators, even where there are more assistant principals assigned to the schools, must devote their time to traffic control and maintaining order, not to leading the school toward improvement or reform.[4]

"In overcrowded schools, teachers all too often are unable to do anything more than cover the required material, with little time for exploration. Administrators . . . must devote their time to traffic control and maintaining order, not to leading the school toward improvement or reform."

Citizens Committee on Planning for Enrollment Growth
New York City

But simply constructing more schools isn't enough; our cities and towns also have to focus on building *better* schools for our children. We pay close attention to making our workplaces as comfortable, useful and safe as possible. Many companies invest resources to design workplaces that maximize productivity, minimize accidents, and satisfy the demands of their workers. Why not in our school buildings, too? In the business world it is difficult to retain quality employees when working conditions are poor. Similarly, keeping the best teachers is more difficult when our school buildings lack the space and facilities needed to do their job well. As for students, they are no more likely to function at peak productivity levels in poorly designed schools than a worker whose space is clumsy, cramped, and accident-prone.

Simply constructing more schools isn't enough. Our cities and towns also have to focus on building *better* schools for our children.

There is a growing body of evidence that the design of school buildings may actually be a key to improving student learning. Class size, along with the debate over smaller schools, has received the most attention among parents, academics, and politicians alike. But many other areas have also begun to receive some attention. The idea of "learning centers" – smaller, more flexible spaces that allow for one-on-one and small group instruction to supplement traditional classrooms – are one promising avenue. Other research has focused on the effect of partitioning existing classrooms into smaller special-purpose areas. And some studies have looked at the effect of environmental factors – which include everything from the amount of light and fresh air in classrooms to the availability of adequate playground space – on the ability of children to learn.[5]

It is important that as parents, teachers, and school officials begin to rebuild their school systems, they consider new ways of thinking about our children's schools. School design should not be exclusive territory of architects or school administrators. Rather, those that will actually use the buildings should have a voice before the first brick is laid. Later, this report will focus on three of the most talked-about design ideas: small schools, community schools, and flexible classroom space.

Resources on School Design Issues:

A comprehensive list of publications on school design, small schools, community participation and other related issues is available at:

http://www.edfacilities.org

Defining Overcrowding

The most basic element of school design is determining how many students can comfortably fit in the building. But determining this is not as simple as it seems. This report uses the Chicago Public Schools' definition of overcrowding, which appears to be reasonably typical of how other school systems approach the question. Each public school building in Chicago has been assigned a **"design capacity"** by CPS officials. This number represents the maximum number of students that can fit in the building. **CPS considers a school to be overcrowded when the enrollment reaches 80 percent of that design capacity.**[6] For example, if the design capacity of a school is 1000, the building can only enroll 800 students before CPS considers it overcrowded.

But the design capacity of a school doesn't always account for the full range of programs that may be offered. Specialized educational programs can reduce the number of students that may reasonably fit into a school building:

- Federal regulations limit the number of students in classes designed for children with **special education needs** or students with **limited English proficiency**. As CPS pursues a policy of inclusion – whereby special education students are "mainstreamed" back into conventional classrooms – school officials must improve the classroom setting to serve a variety of educational needs. This challenge puts still more constraints on how CPS may use its classroom space and how many students can comfortably fit in each room.
- Classrooms for **drama, music, and arts education** require more space per student than classrooms for math or history classes. **Science labs** and other hands-on educational facilities also require additional space. Some **technology improvements**, such as computers in the classroom, take up space that previously was used to accommodate more student desks.
- **Changing instructional methods** have also reduced how many students a classroom may reasonably hold. When many older schools were first constructed, seats were bolted to the floor in fixed rows. Today, desks may be moved to accommodate a number of different "hands-on" classroom activities and small-group discussions. While such arrangements often result in a better learning experience, they tend to work best with smaller numbers of students in each classroom.
- **More students are staying at school for lunch.** Until the 1970s, the majority of children left school at noon to go home for lunch, so buildings built before then don't tend to have lunchrooms. Today, the majority of students stay at school for lunch. To accommodate this relatively recent change, some Chicago schools must begin serving lunch in shifts starting as early as 10:50 a.m. just to have enough lunch periods (given the available space) for all their students to eat.

The design capacity of a school doesn't always account for the full range of programs that may be offered. Specialized educational programs — including technology improvements — can reduce the number of students that may reasonably fit into a school building.

CPS attempts to account for these variables by calculating a second number – the **"program capacity"** – in addition to the design capacity figure discussed previously. **The "program capacity" of a school is the number of students who can comfortably fit inside a school building *given the specific curriculum and specialized programs offered at that school.*** For example, the decision to offer a drama class may take up more classroom space, which means that the building can enroll fewer students. In this instance, the program capacity would be lower than the design capacity.

Unfortunately, program capacity figures rarely enter into the public debate over overcrowding and school design. CPS uses design capacity – not the more refined program capacity figure – to determine whether a school is overcrowded. In many cases, parents, Local School Council members, and even principals are unable to find out their school's program capacity.

The difference between the program and design capacities can be very large. A 1989 CPS report listed design and program capacities for 69 schools. For 41 of those schools (59 percent), the program capacity was at least 25 percent smaller than the design capacity. For example, Funston School had a design capacity of 720 and a program capacity of 388, and an enrollment of 884. These differences can have a very real effect on the day-to-day functioning of a school.[7]

Building Schools For the New Century

While educational practices and student populations have evolved and changed, most of the nation's school buildings have not. Many school buildings are older, and most of the newer facilities simply copied the designs of old. Now, as many municipalities gear up to build tomorrow's schools, a debate is raging about whether the traditional schoolhouse is appropriate for modern technology, current teaching methods, and the advent of school reform movements that have returned greater local control to some communities.

> We are looking at every aspect of education, from the way we run districts, manage schools and classrooms, and organize time to how we test students, hold people accountable, and relate schools to the surrounding community. And we now know that an important element of this systemic reform concerns the physical structures of the schools. American school architecture is as deeply rooted in 19th century values as every other aspect of education. Therefore, if we are to successfully reform the system of primary and secondary education, we must give serious thought to the design of schools and the overall learning environment.[8]

Now, as many municipalities gear up to build tomorrow's schools, a debate is raging about whether the traditional schoolhouse is appropriate for modern technology, current teaching methods, and the advent of school reform movements that have returned greater local control to some communities.

Reformers have advanced a wide variety of proposals for how school systems should rework their ideas about school design to accommodate the changing educational landscape. This report is not intended to evaluate or endorse these various proposals. However, it is important that any analysis of school facilities at least raises the point that **school construction is not just about the number of classrooms, but also about the *quality* of the places where we send our children to learn.**

The U.S. General Accounting Office was pessimistic in its assessment of how well prepared the nation's schools are for modern approaches to education. A 1995 GAO report defined what types of facilities are essential to a "21st Century School" (*see box at the bottom of this page*), and finds that most schools are lacking when it comes to facilities beyond "uniform-sized classrooms with rows of desks, a chalkboard, and minimal resources such as textbooks and encyclopedias."[9]

The GAO found that most schools lack these kinds of up-to-date facilities. About 40 percent of schools – representing 14 million students – lacked adequate science lab or large-group instruction facilities. Over half the schools in the study reported that they lacked flexible classroom space, and two-thirds of schools found that they cannot accommodate day-care activities. On the technology front, the GAO found that most schools do not have the basic communications and electrical infrastructure to support computer technology, including Internet access.[10]

A review of the literature on school design reveals several major threads that frequently surface:

Small Schools are Superior: The design proposal that has received the most attention, both in academic literature and in local reform campaigns, is the idea that smaller schools are better schools. The small schools movement challenges the conventional wisdom that has driven school builders for most of this century. Rapidly increasing student populations during the "Baby Boom" made large schools appear to be the only solution. Consequently, the number of schools has shrunk while average school size has ballooned:

> Schools keep getting bigger and bigger. Between 1940 and 1990, the total number of elementary and secondary public schools declined 69 percent – from approximately 200,000 to 62,037 – despite a 70 percent increase in the U.S. population. Consequently, the average school enrollment rose more than five times – from 127 to 653.[11]

The Needs of a "21st Century School"
From the U.S. General Accounting Office

- Flexible space, including space for small- and large-group instruction;
- Space to store and display alternative student assessment materials;
- Facilities for teaching laboratory science, including demonstration and student laboratory stations, safety equipment, and appropriate storage space for chemicals and other supplies; and
- A media center/library with multiple, networked computers to access information to outside libraries and information sources.

In addition, such schools would also have space for a variety of support activities: private areas for student counseling and testing and for parent support activities, such as tutoring, planning, making materials, and the like; social and health care services, day care; and before- and after-school care.

Overcrowding in the 1990s has generally furthered the notion that big schools are the only option for dealing with rapidly expanding enrollments, particularly at the high school level:

> The increasing enrollment impacts the number of high schools we must build. Entering this equation is the recommended size of the schools we should build. Many school districts continue to build large high schools even though the National Association of Secondary School Principals suggests that the ideal high school should have a maximum of 600 students. About 71 percent of all high school students [in the nation] now go to schools with at least 1,000 students. The number of schools with more than 1,500 students increased by 45 percent between 1990-91 and 1997-98, and the number of students attending schools with enrollment exceeding 1,500 increased by 50 percent.[12]

School district administrators have developed a series of arguments that attempt to justify larger schools as not only a more cost efficient option, but also as a better learning environment. "The thinking behind large schools was that bigger meant more extracurricular opportunities, a more diverse curriculum, and more resources for students as a result of economies of scale," writes Andrew Rotherham of the Progressive Policy Institute. "Intuitively, this makes sense; however, a growing body of research and public opinion indicates that it is misguided and that, when it comes to school size, smaller is actually better."[13] Backers of the small-school concept maintain that fewer students mean more teacher-student contact, fewer discipline problems, better and more flexible environments for learning, and more opportunities for students to attain leadership positions in extracurricular activities.

Definitions vary about what constitutes a small school, though some researchers appear to agree that an elementary school should have between 300 and 400 students and a middle school (housing seventh- and eighth-graders) should have between 400 and 800 students.[14] Other definitions place the number higher or lower.

One approach to implementing smaller schools has been to establish a "school within a school." These are generally smaller educational units with a separate set of students and faculty – and often a specialized curriculum – that function apart from the main school building in which they are located. Advocates contend these schools-within-schools can provide many of the benefits of small schools while taking advantage of the existing buildings in the school system.[15]

Backers of the small-school concept maintain that fewer students mean more teacher-student contact, fewer discipline problems, better and more flexible environments for learning, and more opportunities for students to attain leadership positions in extracurricular activities.

Rebuilding Our Schools Brick By Brick — **page 16**

Chicago has implemented the **school-within-a-school** approach at several locations, including several schools that emphasize specific skills or vocations. One example is the Cregier Multiplex, which houses three schools: Foundations School, Nia School, and Best Practices High School. Oakenwald South School houses two high schools with a special focus: Teacher Prep High School and Graphic Communications High School. All these schools are smaller than the citywide average.

But overall, **Chicago's public schools tend to be large.** Entering the 1998-99 school year, the average Chicago elementary school enrolled 688 students. Of the 443 elementary schools in our sample, 58 had more than 1,000 students during the 1998-99 school year. High schools tend to be even bigger. The average Chicago high school enrolled 1,275 students during 1998-99, with 26 of the 71 schools (37 percent) having more than 1,500 students.

Schools Can Serve As a Community Anchor: Schools are not the only public facilities that face funding shortages. Many neighborhoods also have a pressing need for community centers, job training facilities, arts complexes, public health clinics, meeting spaces, adult education centers, and other public facilities. Some reformers have proposed constructing multi-purpose facilities that serve as traditional schools during the day, but also provide space for after-hours activities that benefit the whole community:

> [T]he construction of community recreation centers as part of schools is a solution for building community support for public education among a growing number of community residents who do not have children in school. Centers are scheduled so everyone in the community can use them, including adult education programs and senior citizens groups. New schools include child care centers, continuing and job training programs, youth programs, programs for parents and families, administration offices, social services, and facilities for community and town hall meetings. In essence, the old "school" becomes a "community hub," a community education and service center.[16]

Redesigning schools as community resource centers with a broader constituency than just parents, students, and teachers might help with the funding dilemma that faces many school districts. "With enhanced social services, commercial spaces, housing, dormitories, and new public facilities in their programs, future public schools may mix a variety of public and private funding sources," writes Roy Strickland, an architect who led the New American School Design Project at the Massachusetts Institute of Technology.[17]

Chicago's Schools Tend to Be Large

- The average Chicago high school enrolled 1,275 students during 1998-99, with 26 schools over 1,500 students.
- The average Chicago elementary school enrolled 688 students during 1998-99, with 58 schools over 1,000 students.

Of course, such major departures from traditional notions of school design are still in their infancy, but many believe that these concepts show promise.

One real-world example of the community school concept comes from the town of Gaylord, Michigan.[18] When Gaylord found it needed a new high school, the school district, like many others around the country, had difficulty passing a bond to raise the money it needed for construction. In fact, two bond measures failed even though it was clear that the old facility was outdated and too small for the growing community. Gaylord school officials switched tactics. They decided to appeal to voters by designing the new building as a community school, with facilities (such as a first-rate auditorium) that everyone in the town can use. The plan worked. Voters saw the potential to use the new building for everything from morning basketball for adults to a community orchestra. In fact, when the school was destroyed by a tornado, taxpayers immediately approved an emergency bond measure to rebuild the school just as it was.

School Designs Should Be Flexible: School buildings on average last between 50 and 60 years.[19] That means that a school that opens its doors in the year 2000 is likely still to be in operation in 2050. School districts must plan to keep these buildings viable, quality places for learning even though they cannot predict the future. Part of the planning challenge is making adequate provisions for new technology, but the more basic issue is simply arranging the space so that it can adapt to changing ways of teaching. Redesigning high schools, in particular, seems to have received a larger share of attention in the literature on school design:

> The traditional, double-loaded corridor with equal-sized classrooms on both sides of a long hallway does not lend itself to tomorrow's teaching and learning styles. Educators, planners, and architects must show the public that high schools need to be transformed. This means designing learning facilities that differ sharply from the traditional buildings of the past.[20]

Flexibility also implies that school designs should fit into the surrounding community and account for the needs and desires of those who will use the school. There is a movement, however, to standardize school design instead of customizing it to a specific location. Chicago and New York City, among others, have adopted a "prototype" approach to school construction in which a handful of basic designs are adapted to specific locations through minor alterations. Ben Reyes, former Chief Operations Officer for the Chicago Public Schools, defended the prototype program. "Prototyping has enabled volume purchasing and expedited construction, not to mention saving construction costs," he says. "The Chicago facilities are more than adequate for the education of the children."[21]

School buildings on average last between 50 and 60 years. That means that a school that opens its doors in the year 2000 will probably still be in use come 2050. School districts must plan to keep these buildings viable, quality places for learning for their entire useful lives, even though no one can predict what challenges and opportunities will face our schools in the future.

But the prototype strategy has its critics, as well. Carol Ross-Barney, a Chicago architect who designed and won an award for Chicago's Little Village Academy, says that the prototype schools do not meet the needs of students or the surrounding communities:

> From my viewpoint, they sacrificed things that did not have to be sacrificed. The schools aren't very nice, and they're going to be there for a long time. They're not really thinking about the character of the [adjacent] neighborhoods or changing educational philosophies. . . . The CPS has done prototyping before, but this time the schools are standoffish in their neighborhoods. They are fortresses – big, two-story brick boxes. There is nothing innovative about it, nothing that says to kids, "Come on in, this is a great place to be." They are prison-like and very institutional, and this is the beginning of these kids' educational futures.[22]

There is, of course, a pressing need to find ways to build and repair schools in the fastest, most efficient, and most cost-effective way possible – all goals of the prototype approach. One compromise solution might be the "kit of parts" method adopted by some school districts, which takes a package of standardized elements and combines them in different ways at each location to accommodate the needs of the site and the school community. Because each of the parts is a standardized product, there is some cost savings, but backers of this approach argue that the more customized design process yields a better result in the end than prototypes.

Ross Barney and Jankowski, Inc., the designers of Little Village Academy as well as Chicago's Chavez School, proved that making these site-specific adjustments need not be expensive. Both schools are located in primarily Latino, "port-of-entry" communities with a good deal of cultural pride. The school designs took into account the background of the students it would serve, using simple materials to create designs that reflect the heritage of the neighborhood. Even better, some of these design elements – such as the working sundial built into the atrium at Chavez – are educational tools as well. The result is that ***Little Village Academy and Chavez became points of community and civic pride, not just another building on the block.***

With or without prototypes, school systems face major challenges in constructing new schools. Prototype designs may be able to save some time and money in the face of intense public pressure to build new space fast and conserve resources so that every school gets the improvements it needs. At the same time, however, prototypes tend to reduce the role of the community in deciding the shape of one of its most important assets and may sacrifice a degree of quality in the rush to replace crumbling buildings and ease overcrowding.

Prototype designs may be able to save some time and money in the face of intense public pressure to build new space fast and conserve scarce financial resources, but they also reduce the role of the community in deciding the character of one of its most important public assets.

Maximizing Our Existing School Buildings

With all the focus on building new schools, it's easy to lose sight of the potential that many existing school facilities have. In Chicago, the most distressed school buildings are often those built in the 1970s, not the oldest structures in the system. The schools constructed in the 1970s tended to be constructed cheaply and shoddily. Those buildings have not stood the test of time.

Many of Chicago's oldest school structures, meanwhile, are still highly functional buildings that can continue to serve as quality schools for many years to come. Adapting these historic buildings to today's educational needs is an important challenge for school planners. Finding ways to update these buildings for modern technology and teaching methods can be very cost efficient when compared to building from scratch, with the added benefit of preserving some of the great buildings that have been a part of our neighborhoods for so many years.

One other reality that school officials must take into account is that many older school buildings – and even some newer ones – enroll far fewer students than they have space for. These facilities – often referred to as "underutilized" schools – have empty desks even while other schools in the district are bursting at the seams. Often, these come about as a result of changing population patterns in the area. For example, as people in a neighborhood get older, their children grow up and there are fewer new kids to take their places in the schools. Sometimes the character of a neighborhood changes, becoming more heavily commercial or industrial rather than residential. And other times, social factors – such as high crime rates – prompt parents to do whatever they can to send their children to schools outside the neighborhood.

Whatever the causes, **the fact remains that many places with an overcrowding problem also have some schools that have extra space that isn't being filled.** Finding some way to make use of this space to ease overcrowding pressures at other schools could be a cost-effective way to deal with part of the enrollment crush. But making use of underutilized schools also has its fair share of problems. The idea of busing students has been dismissed by parents and educators alike as unfair and counterproductive. But there still may be other ways to take advantage of these empty classrooms.

One solution might be to look at the attendance boundaries of nearby schools and evaluate whether shifting them slightly could allow the school district to spread students out more evenly across school buildings. Subtle changes in demographics over the years might cause the original attendance boundaries to become outdated, and relatively minor adjustments might help solve overcrowding problems without requiring students to travel long distances to get to school.

Many of Chicago's oldest school structures are still highly functional buildings that can continue to serve as quality schools for many years to come. Adapting these historic buildings to today's educational needs — and taking advantage of school buildings with extra classroom space — are important challenges for school planners.

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But even if adjusting the attendance area for these underutilized schools doesn't solve the problem, there may still be other ways to take advantage of underutilized schools. Some have suggested that these buildings may be good sites for **specialty or magnet programs** that would attract students from around the school district. Because parents would be ***choosing*** to send their children out of the neighborhood to receive the benefit of a specialized program, the equity issues associated with busing would not be a major concern. Of course, any such program would have to be sensitive to the needs of the families whose children currently attend the underutilized schools. Such special programs should not result in the displacement of children from their neighborhood schools. Instead, special or magnet programs should exist side-by-side with the existing school, or neighborhood children should be guaranteed access to the new programs.

Knoxville, Tennessee, has put a similar idea into practice at five inner-city schools. While the schools themselves were not underutilized, they were located in economically distressed neighborhoods that were not attractive areas for most parents to send their children. In order to desegregate its schools, Knoxville decided it would convert the buildings into truly top-of-the line schools with such high-quality facilities that students would line up to get in, regardless of the buildings' location. These five "magnet centers" – three elementary schools, a middle school, and a high school – were intended to be top-of-the-line schools that would draw students from around the city because of the sheer strength of their programs. The schools included two performing arts and sciences magnets, an honors academy, a technology academy, and a math and science magnet.

These five Knoxville schools also made a special effort to establish links with the surrounding communities, including after-school and weekend activities for parents and students alike. The schools included such special features as community fitness centers, adult computer and literacy training classes, meeting and recreation space, childcare, time for "special needs sessions" on topics such as rental and tax help, and many other activities that made the schools true centers of community.

So far, this experiment by the Knox County Schools has been a success. Demand for slots in the magnet centers has been high despite the fact that they are located in inner-city neighborhoods. In fact, the school district has had to hold a lottery to select students for the facility. The Knoxville example may have important lessons for other school systems that find themselves struggling with both overcrowded schools and underutilized facilities. Knoxville has shown that students from across a city will come to a school if it has standout facilities. Their experience suggests that such an approach might also work for districts that want to rethink their underutilized schools.[23]

School buildings with extra classroom space may be prime candidates for specialty programs or magnet schools. As long as parents have a choice about whether they send their children to these schools, making better use of this extra space may be part of cost-effective solution to overcrowding.

Involving the Community

In the rush to build as many new classrooms as quickly as possible, it is too easy to overlook the need to include the people who will actually use these new buildings. But failing to include the community – parents, teachers, local school council members, community leaders, and even students – reduces the long-term effectiveness of the buildings. Parents know their children's needs better than an outside architect ever could. Community leaders often view a school as a neighborhood resource that can and should be designed in a way that it serves as more than just a place for children.

Including voices from beyond the school bureaucracy introduces new ideas into the planning process, including different perceptions of what constitutes an "essential" facility in a new school. For example, educational planners and architects might not deem an auditorium essential to the operation of a school. But from the perspective of a teacher, parent or a community leader, an auditorium may be indispensable. Student performances (or other local cultural and civic events) draw parents and residents into the school building and help improve its stature in the community. A community leader may see an auditorium as a safe and inviting place to hold neighborhood town-hall meetings that help strengthen the community that supports the school's educational efforts.

In the end, involving the community in the school planning process not only makes for better buildings, but it gives the public a sense of ownership in their school buildings. This is a crucial element not only in school reform, but in the full range of community revitalization activities. Giving people a real stake in the success of their local institutions – and the genuine sense that they can make a difference – is the first and most important step in reclaiming distressed neighborhoods and rebuilding our educational system from the ground up.

Many school districts are beginning to recognize the need for a community voice in the overall capital planning process. There is a pressing need for the taxpayers who pay the bill for school improvements to have some direct say over how the money is spent. Some school districts recognize that keeping the community informed about the progress of the capital program is a good way to build public support for the spending plans. Among the examples of public participation in capital planning are:

Chicago: In the fall of 1995, the Chicago School Reform Board of Trustees appointed a 35-member Blue Ribbon Capital Improvement Program Advisory Committee to oversee and provide input into the implementation of its capital improvement program. The committee – which includes business, governmental, and community representatives – meets monthly with Chicago Public Schools staff to provide input into the capital program and help plan public hearings on the capital budget. CPS also posts its entire Capital Improvement Program – listed by school – on the Internet.

> In the rush to build as many new classrooms as quickly as possible, it is too easy to overlook the people who will actually use these new buildings — children, parents, teachers, and even members of the surrounding community. These people should be included in the school planning process from Day One.

Los Angeles: The Los Angeles Unified School District (LAUSD) also established a Blue Ribbon Citizens Advisory Committee in 1997 in the wake of the district's $2.4 billion bond program. The committee includes representatives of local government, business, builders and architects, labor, parents and teachers, and taxpayers advocates. Its powers and responsibilities include holding quarterly meetings to review expenditures and the progress of the construction program, reporting their findings to the school board and the public, and recommending improvements to the process. In addition, the LAUSD posts a list of all the planned capital improvement projects, by school, along with the status of each project, on its Web site.

San Diego: Like many cities in the West, San Diego's school system has grown at a rapid pace. To keep up with rising enrollments, San Diego voters approved a $1.5 billion bond measure in November 1998 that will provide a major infusion of capital to meet pressing repair and new construction needs. Part of the key to the success of the bond campaign – known as "Proposition MM" – was that the public was involved from the beginning. Nearly two years before the bond measure was put on the ballot, parents, teachers, principals, and community and business leaders gathered to identify each school's most urgent needs. The effort was helped by a promise from the City that property taxes would not increase. Instead, voters were simply asked to continue a current property tax levy that otherwise would have expired in 2003.

In addition to the up-front public involvement that helped build support for the ballot measure, San Diego has put in place a number of ongoing accountability measures. Each school with planned capital projects has a contract signed by the Board of Education, School Superintendent, principal and a teacher representative that identifies all the projects at that school which will receive funding through the bond proceeds. Proposition MM also establishes an independent Citizens Oversight Committee to oversee the use of bond proceeds and the implementation of projects named in the school site contracts. The committee will include representatives appointed by the American Institute of Architects, the American Society of Civil Engineers, the Building Industry Association, the local Chamber of Commerce, the Financial Executives Institute, the San Diego Imperial County Labor Council, the Parent Teacher Council, and the San Diego County Taxpayers Association.

New York: The New York City school district gives the public on-line access to detailed inspection reports for each school that lists the condition of dozens of school facilities, from windows and doors to drinking fountains and environmental safety issues. While most large school districts have conducted such building assessments, it is often very difficult for parents and community leaders to get access to them. Knowing what capital needs the school has gives the public a good measuring stick for evaluating the performance of the capital program.

> In San Diego, each school with planned capital projects has a contract signed by the Board of Education, school Superintendent, principal and a teacher representative that identifies all the projects at that school which will receive funding from the $1.5 billion school construction bond.

Conclusion

School buildings are far more than just shells into which we put students and teachers. The condition of the building, the size of schools and classrooms, and the design of the facility all contribute to the ability of a student to learn. Underlying all the debates about overcrowding and school repairs is the basic idea that our buildings need to be up to the challenge that faces every school system. That challenge is nothing less than educating generations of students for the changing world that lies ahead of them. And as our nation grows and changes, new and different skills will be required for our children to thrive. Education will become an even more important tool for their future, and the buildings in which our children learn will have to change alongside.

School buildings are far more than just shells into which we put students and teachers. They must be up to the challenge of educating our children for the changing world that lies ahead.

The next two chapters will look at how these challenges are playing out in one major city – Chicago. After years of neglect, a new administration in the Chicago Public Schools took the reins and began an aggressive and ambitious program to turn around a failing system. This report will look at one part of that endeavor – meeting the capital needs of a school system already more than 600 buildings strong. We will look at Chicago's high schools and elementary schools separately, examining overcrowding levels, the unique challenges that face each type of school, and look at how well Chicago has been able to meet those challenges. The report will then take a step back and look at the problem through the national lens, examining in more detail the depth and breadth of the national challenges. Finally, we will conclude with a discussion of a national plan to help local school districts meet their capital needs and our recommendations for concrete steps the nation can take to rebuild America's schools.

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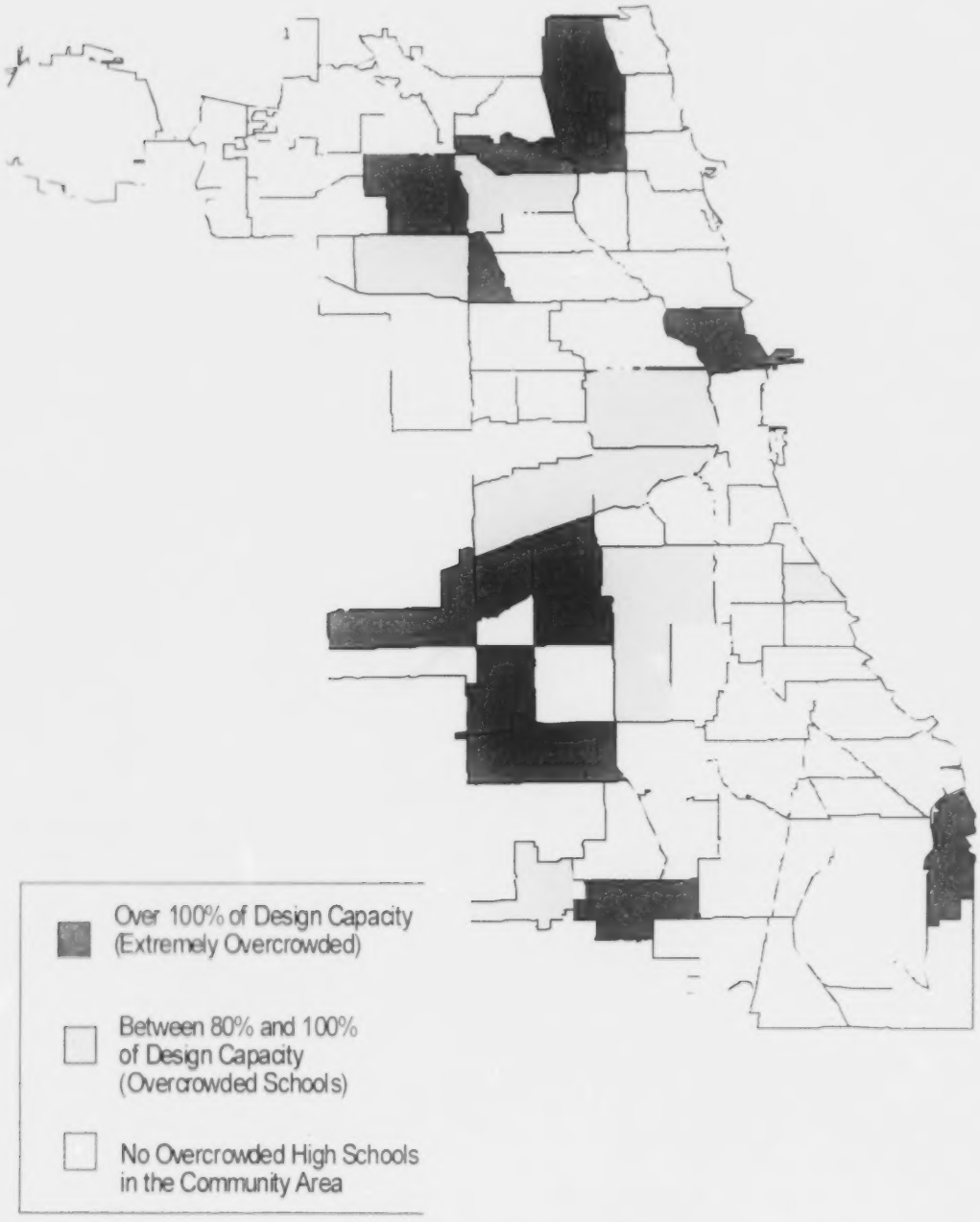
Where Are Chicago's Overcrowded High Schools?



Chapter Two:

Chicago High School Overcrowding

Until the start of the 1999-2000 school year, no new high school buildings had opened in Chicago in two decades. For much of that time, repairs to high school buildings were sporadic at best. Overcrowding remained a persistent problem in over half of Chicago's high schools, making efforts to improve the quality of education that much more difficult. Chicago's high schools – like those across the nation – have not kept pace with changing enrollments, not to mention basic maintenance. In many ways, Chicago's high school buildings symbolized the desperate state of the system as a whole.

But the unique problems facing high schools extend beyond just the construction of new buildings. High school curricula are more complex than those in elementary schools, and they require specialized facilities such as science labs. There are more extracurricular activities in high schools that require teaching spaces such as auditoriums and multipurpose rooms. High schools generally require better gymnasiums and athletic facilities. The greater capital needs of high schools – coupled with greater neglect during the 1980s and early 1990s – put Chicago's high schools in an even more dire position than that faced by elementary schools in the city. Because of these important differences in the scale and the nature of the problem facing Chicago's high schools, we will consider the challenges facing elementary and high schools (excluding transition centers and alternative high schools) in separate chapters. Looking at each one separately will also help convey a clearer understanding of the changing nature of Chicago's school-age population.

A Brief Relief: Overcrowding Dips in 1998-99

The 1998-99 school year saw the first major reduction in high school overcrowding in almost a decade. There were 29 overcrowded high schools – down from 37 the year before. The total number of severely overcrowded facilities – those with enrollments greater than 100 percent of their design capacity – fell from 22 schools during the 1997-98 school year to 16 schools in 1998-99.

Still, overcrowding remains a significant problem in Chicago high schools. Overall, 41 percent of high school buildings remain overcrowded. Over half of those buildings are severely overcrowded. Viewed another way, 51,962 students attend overcrowded high schools in Chicago during the 1998-99 school year – a drop of more than 14,000 from the previous year. But despite this important decline, ***57 percent of Chicago high school students must attend overcrowded schools,***

High School Overcrowding in Chicago

1998-89 School Year (71 high schools studied)

80-99.9% Capacity	number of schools	13
	percentage of schools	18%
Above 100% Capacity	number of schools	16
	percentage of schools	23%
Total Overcrowding	number of schools	29
	percentage of schools	41%

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Overcrowded high schools can be found in many parts of the city, but they are a particularly large problem in the far north, southwest and far southeast neighborhoods (see map on page 26).

This number of overcrowded schools has serious implications for the future of the CPS Capital Improvement Program. By comparing enrollments with the design capacity of each school building, we can estimate how many "overflow" students CPS must accommodate through new construction. For example, Kelly High School on Chicago's Southwest Side has a design capacity of 1,315 students. Because CPS considers a school overcrowded once it surpasses 80 percent, Kelly's working capacity is 1,052 students. As of the 1998-99 school year, however, the school enrolled 2,164 students – an "overflow" of 1,112 students.

If we do that same calculation for all 29 overcrowded high schools, we find that ***the Chicago Public Schools still must find space for 11,763 students in order to alleviate overcrowding at all its high schools, based on CPS' own standards***. That translates into approximately 368 new classrooms full of students, assuming that students are packed into 32-student classes.[1] This figure assumes that enrollments and dropout rates remain constant. If the number of high school students begins to climb, or the school system manages to reduce the number of high school dropouts, then CPS will have to construct still more classrooms to meet the need.

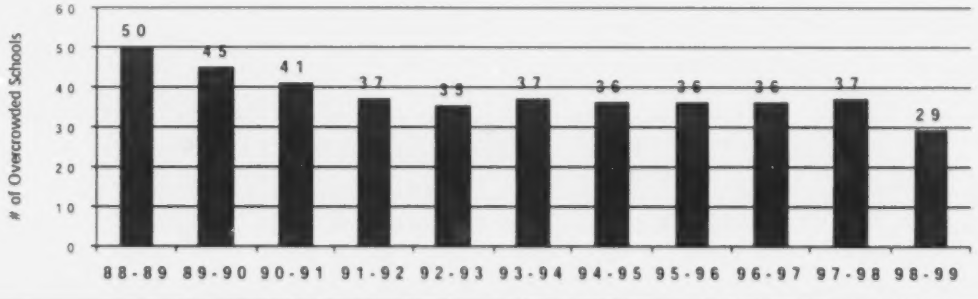
Why Did Overcrowding Decrease During 1998-99?

While it is difficult to separate out every factor that may have contributed to the recent decline in overcrowding, two things are clear:

- The decline is not a result of the efforts of the Chicago Public Schools' Capital Improvement Program. No new high school capacity – either in terms of new school buildings or additions to existing high schools – went on-line during the 1998-99 school year.
- The total enrollment in Chicago high schools declined compared to the previous school year.

While other factors – such as an increase in the number of high school dropouts – may also have played a part in the declining number of Chicago high school students, the root cause of this decline is the temporary demographic change mentioned above. Between the 1997-98 and 1998-99 school years, high school enrollments declined by 2,000 students (from 98,610 in 1997-98 to 96,560 in 1998-99). This decline continues a trend of falling high school enrollments that began during the 1995-96 school year.[2]

Number of Overcrowded High Schools in Chicago, 1988 to 1999



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As the number of students in the system declines, some schools – particularly "borderline" schools that have yet to develop severe overcrowding problems – are likely to see their crowding problems disappear without taking any action. In fact, most of the eight high schools that saw their overcrowding problems abate during 1998-99 were operating at only slightly above their design capacity. Clemente, Robeson, and Julian High Schools all were operating at between 81 and 83 percent of capacity. Englewood and Jones High Schools were operating at 88 percent of capacity, and Marshall, Simeon and Wells operated at between 91 and 93 percent of capacity. These schools did see a significant decline in enrollment – 9,872 students among the eight schools – not just a drop of a few hundred students that pushed them over the edge.

> The decline in Chicago's high school enrollments is only a short "breather" for the public school system.

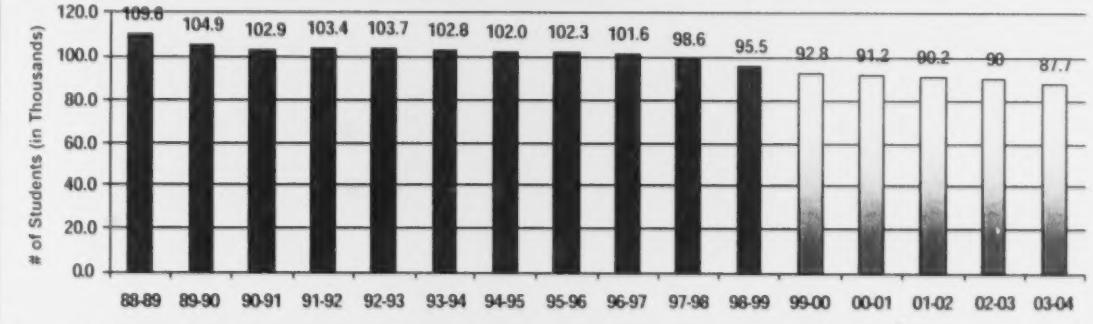
At the same time, however, other high schools continued to experience chronic overcrowding problems and several even saw their overcrowding problem worsen. **A core of 28 high schools have been overcrowded for all 11 years under study – 19 of which have consistently operated at or above 100 percent of their design capacity.** Systemwide, 18 high schools saw their enrollments increase, while 53 saw their student populations decline during the 1998-99 school year. These figures serve to reinforce the point that while Chicago was fortunate to experience a decline in its number of overcrowded high schools during 1998-99, the problem remains severe in many Chicago neighborhoods.

Will Overcrowding Disappear On Its Own?

The decline in Chicago's high school enrollments is only a temporary situation for the City's public school system. As Chapter Three shows in detail, the number of elementary school students has already begun to skyrocket as the children of the "Baby Boom" generation begin to reach school age. Because the number of new elementary students is not expected to decline in the foreseeable future, CPS cannot "wait it out" and hope for smaller classes further down the line.

Chicago high schools are likely to experience a few more years of declining enrollment, however, before they begin to see the impact of fast-growing elementary school populations. According to projections by the CPS Office of Capital Planning, high school enrollments will continue to decline through the 2003-2004 school year – the last year included in the projections. By 2003-2004, public high school enrollment in Chicago will have fallen to approximately 87,700 – almost 9,000 students less than the 1998-99 enrollment of 96,560.[3]

High School Enrollment in Chicago, 1988 to 2003 (projected)



Source: Chicago Public Schools

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Chicago's experience mirrors nationwide trends, where high schools are expected to be "ground zero" for the overcrowding debate in the near future. "Many of America's high schools will face years of intense pressure as they seek to ease overcrowding while raising standards of achievement for all of their students," the U.S. Dept. of Education states in its August 1999 report on the "Baby Boom Echo" – the term given the swell of new students currently entering U.S. schools. According to the Department, ***every state in the nation will see a rise in its high school enrollments***. That translates into a projected 1.3 million new high school students between 1999 and 2009 – a 9 percent increase.[4]

Illinois ranks third behind California and Texas in the number of new high school students it will have to accommodate – 110,000 more in the next decade.[5] To put that figure in perspective, Chicago high schools' total enrollment for the 1998-99 school year was just 96,560 students. In other words, ***in just 10 years, Illinois will have to build enough new high school capacity to house more students than all 71 of Chicago's high school buildings currently enroll.***

Largest Projected Increases In High School Enrollment, by State, 1999 to 2009

California	261,000
Texas	168,000
Illinois	110,000
Arizona	85,000
Florida	82,000
Georgia	79,000
North Carolina	77,000
New York	62,000
Nevada	45,000
Tennessee	37,000

Source: U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*

The Dropout Factor

As dire as overcrowding is in high schools, Chicago is only experiencing the tip of the iceberg. The safety valve that has headed off a full-blown capacity crisis, ironically, is an ongoing tragedy in most Chicago neighborhoods. Each year, CPS graduates fewer children from our public high schools than it loses to dropouts.

Chicago's high dropout rate drastically reduces the number of secondary students that the system has to accommodate. According to a study of Illinois State Board of Education statistics performed by the Greater West Town Community Development Project, Chicago's high school dropout rate during the 1997-98 school year topped 17 percent. For that school year, more students dropped out of Chicago high schools (17,328) than graduated (16,567). ***The dropouts for that year alone would fill over 500 classrooms.*** If we look at the number of dropouts each year over a four-year period, the total number of students who leave the system rises to 64,971 students.[6]

As dire as overcrowding is in high schools, Chicago is only experiencing the tip of the iceberg. The safety valve that has headed off a full-blown capacity crisis, ironically, is an ongoing tragedy in most Chicago neighborhoods. *Each year, the Chicago Public Schools graduate fewer children from our public high schools than it loses to dropouts.*

The real impact of the dropout rate will come is in the future as CPS and the community join forces to significantly reduce the number of children who leave our public high schools. More graduating seniors will require more classroom space. At schools that are already overcrowded, the problem would get worse. Other schools that currently are operating below their full capacity may develop a pressing overcrowding problem.

If, for example, CPS managed to cut the one-year dropout rate from its 1997-98 level of 17.57 percent to 10 percent, ***Chicago high schools would have to accommodate more than 7,000 additional students per year.*** Even if Chicago managed to make that drastic an improvement, its dropout rate would still be twice the statewide average of 4.68 percent.

> If Chicago managed to cut its dropout rate to 10 percent, high schools would have to accommodate 7,000 additional students per year.

Of course, such a decline in the dropout rate would be a tremendous victory for our schools and our children. But CPS and the taxpaying public must confront the fact that such success will require an even greater commitment to the capital program. As we solve one problem — high dropout rates — the overcrowding problem that already plagues Chicago high schools could become much worse if we don't plan new high schools now.

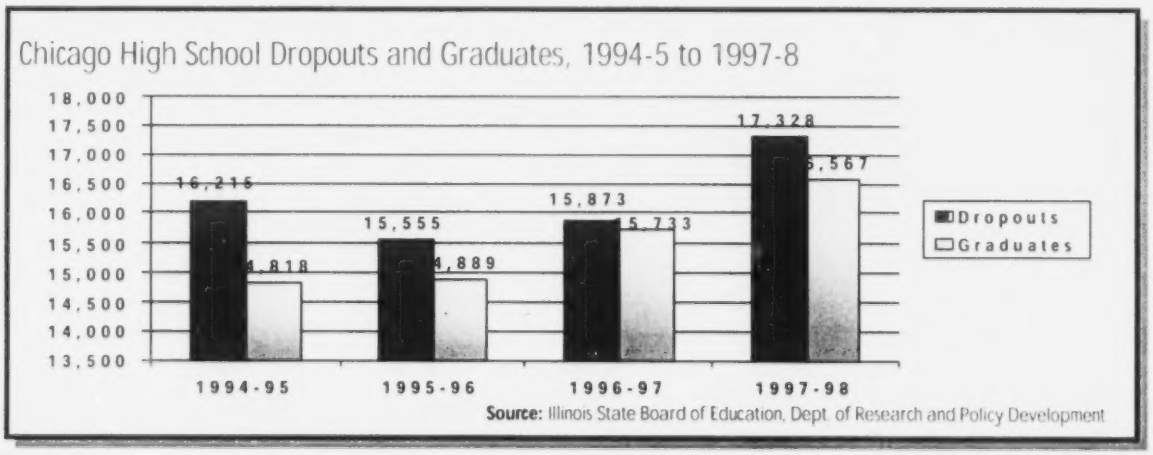
Other Factors Affecting Overcrowding

In addition to demographic changes and dropout rates, though, there is a long list of other factors that ultimately will affect the degree and location of the overcrowding problem.

Shedding the "Image Crisis"

It is no secret that the Chicago suffered from a terrible (and largely deserved) image problem during the late 1980s, when its schools were branded the "worst in the nation." Nor is it news that Chicago has gone a long way toward shedding that image, winning not only local accolades but also highly visible praise from the Clinton Administration.

If CPS continues to make progress in winning back the public trust, then parents will be less likely to look for other educational alternatives and more likely to send their children to public schools in the City. If and when more parents make the decision to send their children to the public schools, student enrollments could grow at a faster pace than in years past. As with dropout rates, educational improvements could create the need for still more new classrooms.



Source: Illinois State Board of Education, Dept. of Research and Policy Development

Changing Private School Enrollments

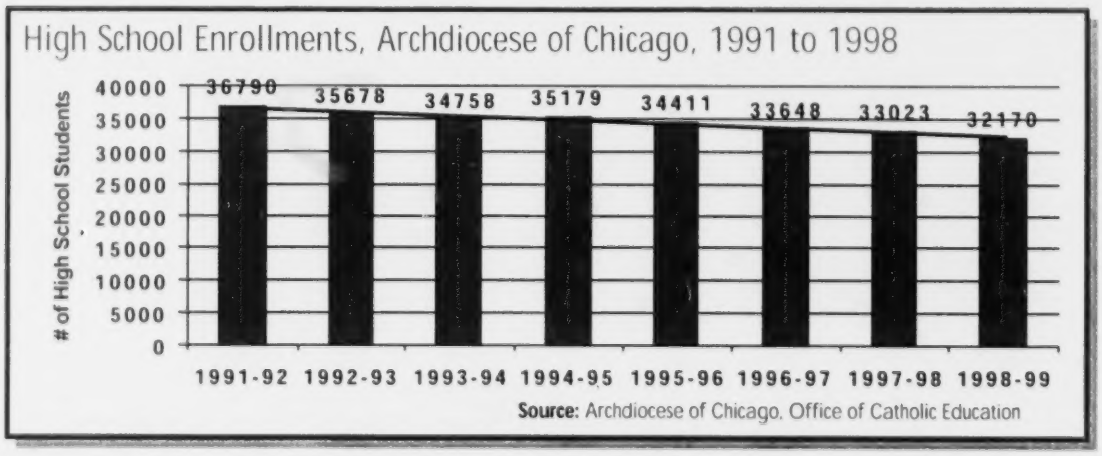
Chicago has an extensive system of private schools at both the elementary and high school level, many of them administered by the Roman Catholic Archdiocese of Chicago. During the 1998-99 school year, the Archdiocese operated 47 high schools that enrolled 32,170 students throughout Cook and Lake County. Twenty-nine of these high schools were located within the Chicago city limits. Because the Archdiocese spreads beyond the Chicago city limits, many of these students live outside the Chicago Public Schools system. Still, Catholic schools divert a substantial number of students from the puolic school system and reduce the need for Chicago to construct more classrooms.

> While Catholic school enrollments in Chicago are falling, private high schools still divert a significant number of students from the public school system.

Overall enrollment in Catholic schools (elementary and high school) has declined over the years, from 289,000 in 1965 to 122,494 in 1998. During that same period, the number of Catholic high schools declined from 95 to 47. In most City neighborhoods — with the exception of the Near North Side, Far Northwest Side, and Rogers Park — that decline is expected to continue in the coming years. In some of the Archdiocese's suburban areas — particularly those in the far north and far northwest portions of its territory — Catholic school enrollments are expected to grow.[7]

If current trends continue, the Chicago Public Schools may see more former Catholic school students entering its ranks, either because Catholic schools are shutting their doors or improvements in the public school system are attracting parents and children back to CPS. A 1996 task force report prepared by the Archdiocese identifies trends within its school system, and ways in which it can improve the marketing and services of Chicago's Catholic schools. In some areas, the success of these efforts could affect enrollment and overcrowding levels at certain public schools.

Of course, there are other religiously affiliated schools in Chicago besides those administered by the Archdiocese, as well as private schools with no religious affiliation. While the decentralized nature of these schools makes it difficult to obtain consistent data, there is no doubt that the same sort of give-and-take exists with the Chicago Public School system.



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Changing Economic Climates

Changes to the City's economic climate are also likely to affect overcrowding. Good economic times have meant more residential construction within the City limits, some of which has taken place in areas such as the South Loop that traditionally has had very little residential space. As former commercial districts and industrial corridors "go residential," new schools might be needed in neighborhoods where before little or no need existed. Meanwhile, historically distressed neighborhoods are also rebuilding, creating more demand for school space in those areas.

> Good economic times have meant more residential construction within the City limits. Meanwhile, some commercial districts and industrial corridors "go residential," creating new demand for schools.

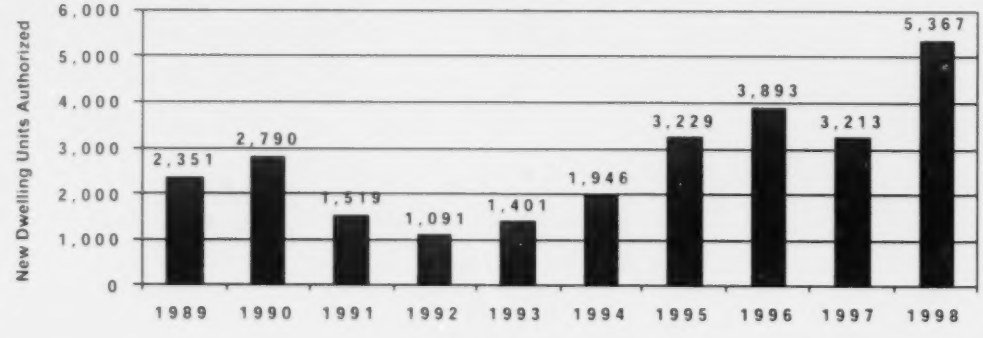
Evidence of the building boom is clear. In 1998, the City of Chicago authorized the construction of 5,367 new dwelling units – by far the highest level in any of the last 10 years, and more than twice as high as the number of new dwelling units authorized in 1989.[8] CPS and the City will have to work together to track and anticipate new housing development and the impact it will have on overcrowding, and make appropriate plans to ensure that the building boom does not put undue pressure on existing public school facilities.

Other Factors

There are many other factors that might have an effect on the severity and timing of overcrowding in the future. For example, retaining more students and ending social promotion — the practice of moving a student to the next grade regardless of academic performance — will change the number of students at each grade level, and ultimately affect when they reach high school. Changes to special education policy may also affect the effective capacity of each school.

Even the way schedules are designed could have an effect on overcrowding. Many schools, for example, use "split shifts" to minimize the number of students in the building at any given time. One group of students may begin school earlier and leave earlier, while other students may begin their day in late morning and go until later in the afternoon. Lunch periods are also spread out over several hours to minimize the required size of the cafeteria. Each change CPS makes to its daily school operations could affect overcrowding. Some of these changes could help to ease overcrowding at certain schools, while others could serve to make the problem worse.

New Dwelling Units Authorized, 1989 to 1998



Source: Chicago Public Library, Municipal Reference Section, *Facts About Chicago*

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Overcrowding: What Has Chicago Accomplished?

The Chicago Public Schools *Capital Improvement Program* was launched with high expectations and much fanfare. The 1999-2003 CIP touted Chicago's plan as "the largest urban school construction program underway anywhere in the nation."[9] In fact, however, Chicago's program isn't the single largest in the nation. The value of construction bonds in New York, Los Angeles, and Las Vegas, for example, far exceed the amount Chicago has borrowed to finance its construction program. Still, Chicago's school construction program has been aggressive, and, to a large extent, successful in fixing school buildings and building new classrooms.

> To date, Chicago has been far slower to construct new high school capacity than new elementary school classrooms.

New construction in Chicago's high schools, however, has been much slower to materialize. While CPS completed many new additions and annexes at the elementary school level, the first new high school classrooms didn't come on-line until the 1999-2000 school year. The opening of Chicago Military Academy in Bronzeville and North Side College Preparatory School on the far Northwest Side were certainly important milestones for CPS. These schools — costing a total of $68.7 million — are, after all, the first new high schools to open in Chicago in two decades. But it is too early to tell whether these schools will help ease overcrowding because enrollment data for the 1999-2000 school year are not yet available. Moreover, the decision to prioritize these projects was clearly driven by concerns other than alleviating overcrowding at neighborhood high schools. Rather, both new high schools addressed the need to offer specialized, alternative programs that could attract and retain highly motivated students and those students who otherwise would have left the public system for private schools or the suburbs.

"We want to compete academically with private schools, but we're not necessarily trying to steal their student bodies," said Ald. Patrick O'Connor (40th) in the wake of the City Council Zoning Committee's approval of the North Side College Prep project. "Our target market is those who move to the suburbs so they can go to a public school where their property taxes pay the tuition."

The other Alderman whose ward is likely to benefit from the new North Side Prep high school – 47th Ward Ald. Eugene Schulter – expressed similar sentiments. "We've been bleeding to death by allowing families to leave for the suburbs because of our schools," Schulter said. "Let the message go out loud and clear: Stay in Chicago."[10]

Completed New High School Construction in Chicago

North Side College Preparatory School: $44.7 million
Bryn Mawr Avenue and Kedzie Avenue
Opened August 1999

Chicago Military Academy – Bronzeville: $24 million
3519 S. Giles Ave.
Opened August 1999

How Much New High School Construction is Planned?

Much more remains to be done to meet Chicago's high school capital construction needs. CPS currently has planned seven high-school additions, four replacement high schools, and five new high school sites. Three of these five high schools are intended as traditional neighborhood high schools, while the other two (Chicago Academy of Math, Science and Language and Teacher's Academy) will have more specialized programs. The three neighborhood high schools will be the first such facilities to open in over twenty years.

Unfortunately, it appears that the funding and priority levels for new high school construction has slipped – in most cases rather significantly. ***Overall, the stated commitment to new high school construction projects, both additions and new schools, declined by $165.3 million.***

The large change in planned allocations makes clear that CPS is having a hard time securing and sustaining the funding necessary for these multi-million-dollar projects. The end result is that parents and students will have to wait longer for new facilities that relieve packed classrooms or replace crumbling buildings.

New High Schools

Five new high school sites are expected to open as part of the CPS Capital Improvement, but only one — the Chicago Academy of Math, Science and Language, on the Near North Side — is fully funded and has seen construction get underway. The rest of the schools have seen their planned allocations decline or disappear, their start dates pushed back, and the future of the project thrown into turmoil.

It remains unclear when these new high schools will open – or where the money will come from to fund the construction. Two of the planned schools have no funding commitment at all, and the other three only have small amounts budgeted for planning, design, and land acquisition purposes. While these are essential steps toward construction, there remains a need to identify how much money will be available to actually build the schools, and where those funds will come from. The average anticipated cost of a new high school, according to CPS CEO Paul Vallas, is $35-40 million. This represents a daunting fundraising challenge for any public school system, even Chicago's.

The table at the bottom of this page shows how CPS changed its commitment to the high schools between the 1999-2003 Capital Improvement Program (CIP) and the most recent (2000-2004) CIP. The Capital Improvement Program is the Chicago school system's five-year plan for new construction and facilities repair. Note that for three of the five schools, the start date was pushed back and the planned allocation for the project was reduced.

Changes to Planned New High Schools in Chicago

	1999-2003 CIP		2000-2004 CIP		
School	**Allocation**	**Date**	**Allocation**	**Date**	**Difference**
Back of the Yards	$30,000,000	2001-2003	$0	2001-2004	($30,000,000)
Chicago Academy of Math & Science	$31,000,000	1999	$31,000,000	1999	$0
Little Village	$30,000,000	2000	$1,500,000	2001-2004	($28,500,000)
Southwest Side	$30,000,000	2001-2003	$0	2001-2004	($30,000,000)
Teacher's Academy	Not Listed		$3,000,000	2001-2004	$3,000,000

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Replacement High Schools

In addition to the new area schools CPS also plans to build three replacement high schools. While none of these three schools – Hancock, Simeon, and Westinghouse – are considered overcrowded, the buildings are generally recognized to be inadequate facilities that have such severe capital and design deficiencies that replacement is the only option. The Westinghouse project, which is new in the 2000-2004 CIP, received a $3 million allocation and a planned construction date of sometime between 2001 and 2004. Hancock saw its project change from an addition to a replacement school. With the change, the project schedule slipped by a year and its $15 million allocation disappeared. Simeon saw a similar change — its planned allocation declined from $25 million to $2 million, and its construction was delayed from 2000 to 2001-2004.

> The vast majority of the planned new high schools and high school additions saw funding reductions and delays.

High School Additions

The situation facing high school additions is similar to the problems with new high school construction. Four high schools found out their additions had been delayed, and one small, non-classroom project was eliminated from the budget. There were two new high school addition projects in the CIP – at Richards and South Side College Prep – both of which were funded and set for construction in either 1999 or 2000. One school – Kelvyn Park – had their replacement school project changed to an addition.

Of the seven schools scheduled to receive new additions, five are at schools that are considered overcrowded (Gage, Juarez, Kelly, Kelvyn Park, and Richards). One addition is slated for Jones High School, which operated at just 50 percent of its capacity during 1998-99. Jones is in the midst of a transition from a vocational high school to an academic magnet, and the South Loop neighborhood in which it is located has experienced significant residential growth in the past several years that might increase the need for high school space. Southside College Prep, which is currently operating at 33 percent of its capacity, is also slated for an addition.

Changes to Planned New High School Additions in Chicago

	1999-2003 CIP		2000-2004 CIP		
School	**Allocation**	**Date**	**Allocation**	**Date**	**Difference**
Gage Park	$15,000,000	2000	$0	2001-2004	($15,000,000)
Jones	$15,000,000	2001-2003	$5,000,000	2001-2004	($10,000,000)
Juarez	$15,000,000	1999	$5,500,000	2001-2004	($9,500,000)
Julian	$385,000	1998	Eliminated		($385,000)
Kelly	$15,000,000	1999	$5,000,000	2001-2004	($10,000,000)
Kelvyn Park	$30,000,000	2000	$5,000,000	2001-2004	($25,000,000)
Richards	Not Listed		$5,100,000	1999	$5,100,000
Southside Prep	Not Listed		$20,000,000	2000	$20,000,000

Are the Most Overcrowded Neighborhoods Getting Top Priority?

A number of severely overcrowded high schools do not have any planned capacity additions. ***In fact, 13 of the 16 schools operating at above 100 percent of their design capacity do not have any planned capacity additions listed in the 2000-2004 Capital Improvement Program.*** Overall, 24 of the 29 overcrowded high schools do not have any planned capacity additions.

It is possible that CPS hopes that capacity additions at other, nearby high schools or citywide magnet programs will meet the capacity needs at the overcrowded high schools that have no additional classrooms planned. In order for such an approach to work, CPS would have to find 9,235 available seats at other high school facilities.

Even if these schools secure a promise of an addition next year, there are still many other as-yet uncompleted projects in line before them, and they are likely to have to wait until at least 2004 to see any real improvement.

In order to gain a better understanding of how planned capacity additions affect existing overcrowded high schools, NCBG mapped the locations of overcrowded schools next to the location of planned new classroom capacity (both new high schools and additions). In general, planned new high school constructed tended to be at or near other overcrowded facilities. This held true both for additions and for new construction. The only exceptions came where CPS deemed it necessary to replace an existing high school for some reason other than overcrowding. (See the section on replacement schools earlier in this chapter for more details).

The mapping exercise leads to two conclusions. First, the locations that CPS chooses for new high school construction are reasonable candidates for new capacity. CPS appears to be in touch with which schools are overcrowded, and, where possible, moving to take appropriate steps. The administration should be commended for these steps.

But the map also reinforces the conclusion that much remains to be done, and in some areas, very little new construction is on the table. The need for more high school capacity — and better use of existing classrooms — is clearly stretching CPS to its limits. Given these circumstances, openness and accountability about which projects are planned and how funds are spent become increasingly important to parents, students, teachers, and taxpayers alike. Gaining a complete understanding of CPS's capital spending priorities — particularly on the new construction front — still requires more time to analyze data and watch how funding developments unfold.

Severely Overcrowded High Schools With No Planned Capacity Additions

School	% Capacity	School	% Capacity
Amundsen	135%	**Hubbard**	104%
Mather	135%	**Bogan**	104%
Kennedy	115%	**Curie**	103%
Von Steuben	113%	**Dunbar**	103%
Foreman	110%	**Morgan Park**	102%
Roosevelt	110%	**Prosser**	100%
Washington	105%		

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"Underutilized" High Schools: A Possible Solution to Overcrowding?

At the same time that some high schools are dealing with crippling levels of overcrowding, other high schools are operating at well below their design capacity. There are several possible reasons why this might be the case at a particular school. Perhaps fewer children live in the area than in years past, or residential properties were converted to commercial, industrial, or institutional use. Parents might avoid sending their children to certain schools because of poor academic reputations, because the building is in poor condition, or because the school is located in an area with especially bad problems with gangs and drugs. Finally, it is possible that the school appears underutilized because the design capacity figure reported by CPS is substantially higher than the building allows in the "real world."

If there really are available seats at an apparently underutilized school, then there is a possibility that the available space may be used to help relieve overcrowding at another school. As discussed in Chapter One, forcibly busing students out of their neighborhoods in order to relieve overcrowding has been almost universally rejected as a policy option. But there may be some other solutions — such as adjusting the attendance boundaries of schools, or establishing specialty or magnet programs — that could make underutilized buildings part of the overcrowding solution.

There are 34 underutilized high schools (at or below 65 percent of their design capacity) in Chicago in the 1998-99 school year. These schools have room for an additional 16,716 students. In order to get a better idea of how underutilized schools might be used to reduce overcrowding, NCBG mapped overcrowded schools next to those schools operating at significantly below their capacity.

It appears that in some neighborhoods, there is a possibility that CPS might be able to take some advantage of underutilized schools to take advantage of nearby overcrowded facilities.

On the North Side (north of Belmont Street from the Lake to the western border of the City), there are seven overcrowded high schools and four underutilized facilities. For example, Senn High School, at 62 percent of capacity, is almost exactly equidistant from the overcrowded Amundsen and Sullivan High Schools.

The Southwest Side does not appear to have much opportunity to take advantage of underutilized classrooms. Virtually all of the high schools in that part of the City are overcrowded.

> By looking at where overcrowded high schools are located in relation to underutilized facilities, it may be possible to find some creative, low-cost solutions to overcrowding.

How Much Will It Cost To Reduce Overcrowding?

While it is always difficult to speculate about the future, there is a pressing need to estimate how much it will cost to solve the overcrowding problem in Chicago's high schools. Knowing the scope of the problem makes it possible for elected officials, school planners, and the public to establish priorities and develop a strategy for solving it. Without a clear assessment of the situation, it is difficult if not impossible to craft a strategy for raising the money and getting the work done.

To estimate how much it will cost Chicago to solve its high school overcrowding problem, NCBG followed three steps:

Step One:
Determine the Number of "Overflow" Students That Need New Classrooms

As noted earlier, a school is considered overcrowded if it is at or above 80 percent of its design capacity. A 1,000-student school, for example, is overcrowded when it has 800 students or more. Any students above that figure are "extra" or "overflow" that school officials must find space for. If 900 students attended this 1,000-person, school, for example, there would be an "overflow" of 100 students. Doing that same calculation for every overcrowded high school, we find that Chicago must find space for 11,763 additional students in order to eliminate overcrowding, assuming that no more students enter the system. Given that elementary school enrollments are expected to grow significantly, it is likely that the figure will be much higher several years down the road.

Step Two:
Determine The Cost *Per Student* To Build A New High School

The next step is to figure out the average cost per student of constructing a new high school. To do this, we looked at national statistics compiled by Wall Street analyst Dun and Bradstreet and published in the *School Planning & Management 1999 Construction Report*.[11]

To determine the cost per student of building a new high school, we took a combination of two measurements: the average cost per square foot, and the average number of square feet needed per student. By multiplying these two measures, we get a good average cost per student that we can use for the next step.

cost/sq. ft * sq. ft./per student = cost/per student

Alleviating overcrowding in Chicago's high schools through new construction will cost between $219 million and $330 million even if no additional grade school students enter the system in the next five years.

Construction costs vary from place to place based on the cost of materials in the region, the price and availability of labor, and many other factors. These costs tend to be higher in cities such as Chicago, so we used the higher end of our average cost scale to make our estimate.

Similarly, cities such as Chicago tend to have less space for school buildings, and consequently have to make them fit on smaller pieces of land. We therefore used estimates on the lower end of the square foot per student scale.

Estimate #1: Low End of the Range

The more conservative cost estimate uses:

- The average cost per square foot in the most expensive 25 percent of school districts ($133.33).
- The average number of square feet per student from lowest 25 percent of projects (138.6)

$133.33 * 138.6 = $18,580 per student

Estimate # 2: The High End of the Range

The more expensive estimate uses:

- The average cost per square foot in the most expensive 10 percent of school districts ($157.17).
- The median number of square feet per student of all school construction projects (178.3)

$157.17 * 178.3 = $28,023 per student

Step Three:
Calculating the Final Cost

Now that we know the cost per student and the number of students, we can calculate a range of estimates for how much it would cost to build enough new high schools to alleviate overcrowding:

Low Estimate:

$18,580/student * 11,763 students = **$218,556,540**

High Estimate:

$28,023/student * 11,763 students = $329,634,549

Repairing and Improving Existing High Schools

While new construction is a very important part of the high school capital plan, repairs and upgrades to existing buildings are also essential to the quality of life at Chicago's high schools. Unfortunately, the funding troubles, canceled projects, and delays that are surfacing in CPS' new construction efforts extend to the repairs and upgrades needed to make our schools safe and effective learning environments. These funding reductions were spread across most of Chicago's public high schools, not limited to a few special cases. ***In fact, 57 of Chicago's 75 high schools included in the CIP (76 percent) saw their expected capital allocation decline.*** Of those, 47 high schools saw their planned allocations reduced by $1 million or more.

Overall, seven program areas (outside of the new construction categories) saw their allocations decline. Energy efficiency programs, almost across the board, were eliminated or delayed significantly – an apparent shift in policy by CPS. Major capital renovations – the term CPS uses for repairs to windows, electrical systems, roofs, exteriors and other basic building elements – also saw a major decline. These projects, however, did not tend to be eliminated outright. Instead, funding was revoked from projects, start dates were delayed until some point between 2001 and 2004, and no cost estimates were given to give the public a sense of the extent of the repairs needed. Still, these basic repairs are still technically "on the books" and await dollars from some future funding source.

Despite the widespread cuts to many categories of capital improvements, several programs did see an increase in their funding in the 2000-2004 CIP:

Science labs saw the biggest increase in allocations, largely because 11 new science lab projects totaling $5.7 million were added to the 2000-2004 CIP. These additions were in part a direct result of campaigns by parents and community leaders for better science programs in the Chicago Public Schools. CPS has agreed that science facilities and curriculum upgrades are essential to its ability to attract and retain students.

The increased allocations for accessibility improvements required under the Americans With Disabilities Act is not the result of new projects. In fact, 26 of the 46 ADA projects were eliminated as part of the 2000-2004 CIP; only one new project was added. The higher allocation overall is attributed to cost increases in nine of the accessibility projects which had already been identified in previous CIPs. In general, however, these increases are minor in the context of the entire capital improvement program.

The current state of the high school Capital Improvement Program shows that there is fierce competition for dollars to fund not only new construction, but also basic repairs and upgrades. Until more funds are identified for school capital needs, school officials may continue to be forced into difficult choices about where their priorities lie.

Shifting Priorities in the 2000-2004 Capital Improvement Program

Project Areas With Declining Allocations

Category	Change in Funding
Energy Efficiency	($55,224,881)
Major Capital Renovations	($44,491,504)
Student Locker Upgrades	($17,569,005)
Career Academy Upgrades	($3,575,181)
Educational Technology	($2,329,766)
Infant/Toddler Care Centers	($1,792,562)
Improved Public Safety	($145,000)

Project Areas With Increasing Allocations

Category	Change in Funding
Science Lab Upgrades	$5,737,274
Transition Centers	$2,545,264
Accessibility Improvements	$1,897,858
Swimming Pools	$756,506
Modular Units	$630,000
Gymnasium Upgrades	$566,309

Where is All the Money Going?

As noted before, the Chicago Public Schools Capital Improvement Program has been successful in many ways. Through the 1998-99 school year, CPS has completed $126.3 million worth of improvements at Chicago high schools.

The largest chunk of that total ($66.8 million) is for "major capital renovations" — the basic repairs to school buildings such as fixing broken windows, leaky roofs, and drafty doors, as well exterior maintenance such as tuckpointing. When the Capital Improvement Program began in 1996, the first major emphasis was on stabilizing the exterior of the buildings to prevent further damage to the schools. The $10.2 million spent on energy efficiency projects also was aimed at fixing and upgrading the most basic heating, cooling, lighting, and electrical systems of the buildings. Many major capital renovations remain to be done, though the majority of these are inside the building, not part of the "exterior envelope" that was the focus of the first phase of the CIP.

> Over half of the high school projects completed so far in Chicago have been for basic repairs. Educational improvements — such as science labs and computer technology — have so far lagged behind.

CPS has also spent a significant amount of money — $17.3 million — on high school transition centers for students that are not academically ready to enter mainstream high schools. These funds have been largely used for renovating leased buildings for use in the CPS system.

But the Capital Improvement Program is not aimed entirely at basic repairs or even new construction. Upgrading existing schools with modern facilities and "educational enhancements" such as computer technology and science labs is also a major thrust of the program. So far, however, relatively little has been spent on these types of projects. About $9.5 million has been spent to upgrade science labs, and just under $1 million has been spent to improve educational technology (such as computer networks to bring the Internet to the classroom), according to the CIP. Just under $2 million has been spent on upgrades to gymnasiums and swimming pools.

Completed High School Projects Through the 1998-99 School Year

Project Type	Amount	Project Type	Amount
Major Capital Renovations	$66,783,005	**Accessibility Upgrades**	$1,851,294
Transition Centers	$17,266,698	**Modular Units**	$1,843,600
Energy Efficiency	$10,220,077	**Swimming Pools/Gyms**	$1,918,960
Science Lab Upgrades	$9,499,215	**Infant/Toddler Centers**	$1,049,076
Student Locker Upgrades	$7,205,893	**Educational Technology**	$985,731
Career Academy Upgrades	$7,137,192	**New Construction**	$500,000

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But as the Capital Improvement Program moves into its fourth school year, the difficulties of planning and completing so many projects is beginning to take its toll. The latest CIP — which covers the period between 2000 and 2004 — reveals that CPS has overextended itself with the promises it made to many schools. In fact, in high schools alone, almost $120 million worth of projects have been eliminated from the CIP.

Eliminated Projects

The perceived need to eliminate certain projects from the CIP hit energy efficiency initiatives the hardest. Almost $47 million worth of energy efficiency projects were eliminated outright from the CIP. Just over $30 million worth of basic repairs were cut from the budget, along with more than $30 million worth of new construction projects (including additions, conversions, and new schools). Surprisingly, given the focus on computers in schools, $3.6 million of educational technology projects were also eliminated. Even projects intended to bring Chicago schools into compliance with the Americans With Disabilities Act were cut, with $2.5 million worth of these ADA projects disappearing in the 2000-2004 CIP.

Projects With Funding Cuts

In addition to the projects that have been eliminated outright, there are a number of projects that have seen their funding revoked. These projects — which had been listed as "funded" in the 1999-2003 capital plan, now are listed as "unfunded." Without a concrete funding source, the future of these projects is up in the air.

Overall, 40 previously funded high school projects saw their funding disappear. These projects represent a decline in planned capital spending of over $141.7 million — a substantial change by any measure. The greatest share of this — $75 million — came in the area of new school construction. The next largest declines came in the areas of additions ($30 million), locker upgrades ($15.1 million) and major capital renovations ($12.5 million).

Is CPS Reaching Its Limits?

$120 million worth of high school projects were eliminated from the CIP.

Another $141.7 million of high school projects saw their funding revoked in the 2000-2004 CIP.

Changes to the High School Capital Program, 1999-2003 to 2000-2004 CIP

Eliminated Projects

Energy Efficiency	($46,760,000)
Additions	($30,385,000)
Major Renovations	($30,201,513)
Educational Tech.	($3,639,356)
Career Academy Upgrades	($3,092,028)
Accessibility Upgrades	($2,535,737)
Locker Upgrades	($2,297,000)
Other	($845,000)

Projects That Lost Funding

New Schools	($75,000,000)
Additions	($30,000,000)
Locker Upgrades	($15,121,000)
Major Renovations	($12,500,000)
Energy Efficiency	($6,000,000)
Infant/Toddler Centers	($3,000,000)
Accessibility Imp.	($100,000)

End Notes

1. 32 students per classroom is the maximum number allowed in the contract between the Chicago Teachers Union and the Chicago Public Schools. NCBG recognizes that 32-student dassrooms are larger than many parents and educational experts prefer, but we have chosen to use this number throughout the report to provide a conservative estimate of costs.

2. Enrollment data prior to the 1998-99 school year is taken from the Office of School Financial Services, *Chicago Public Schools Comprehensive Annual Financial Report for the year ended June 30, 1998*, pp. 136-137. Enrollment data for the 1998-99 school year is taken from the CPS Office of Accountability, Dept. of Compliance, *Student Racial/Ethnic Survey Reported As of September 30, 1998*, p. xi.

3. CPS enrollment projections for the 1999-2000 through 2003-2004 school years were provided to NCBG by the Office of Capital Planning.

4. U.S. Dept. of Education, The *Baby Boom Echo: No End in Sight*, August 19, 1999.

5. *Ibid.*

6. Figures on high school dropouts come from the Greater West Town Community Development Project's analysis of the high school dropout problem, *Chicago's Dropout Crisis: Hard Facts About Our High School's Continuing Dropout Problem*. That study was based on figures reported by CPS to the Illinois State Board of Education's Dept. of Research and Policy Development. Additional background came from Jorge Luis Mota, "¿Manzana Podrida?" *Exito*, Sept. 2, 1999, p6.

7. Enrollment data for Chicago's Catholic schools was provided to NCBG by the Archdiocese of Chicago's Office of Catholic Education. NCBG also drew on a report by the Archdiocese's Special Task Force on Catholic Schools, *Final Report*, Summer 1998.

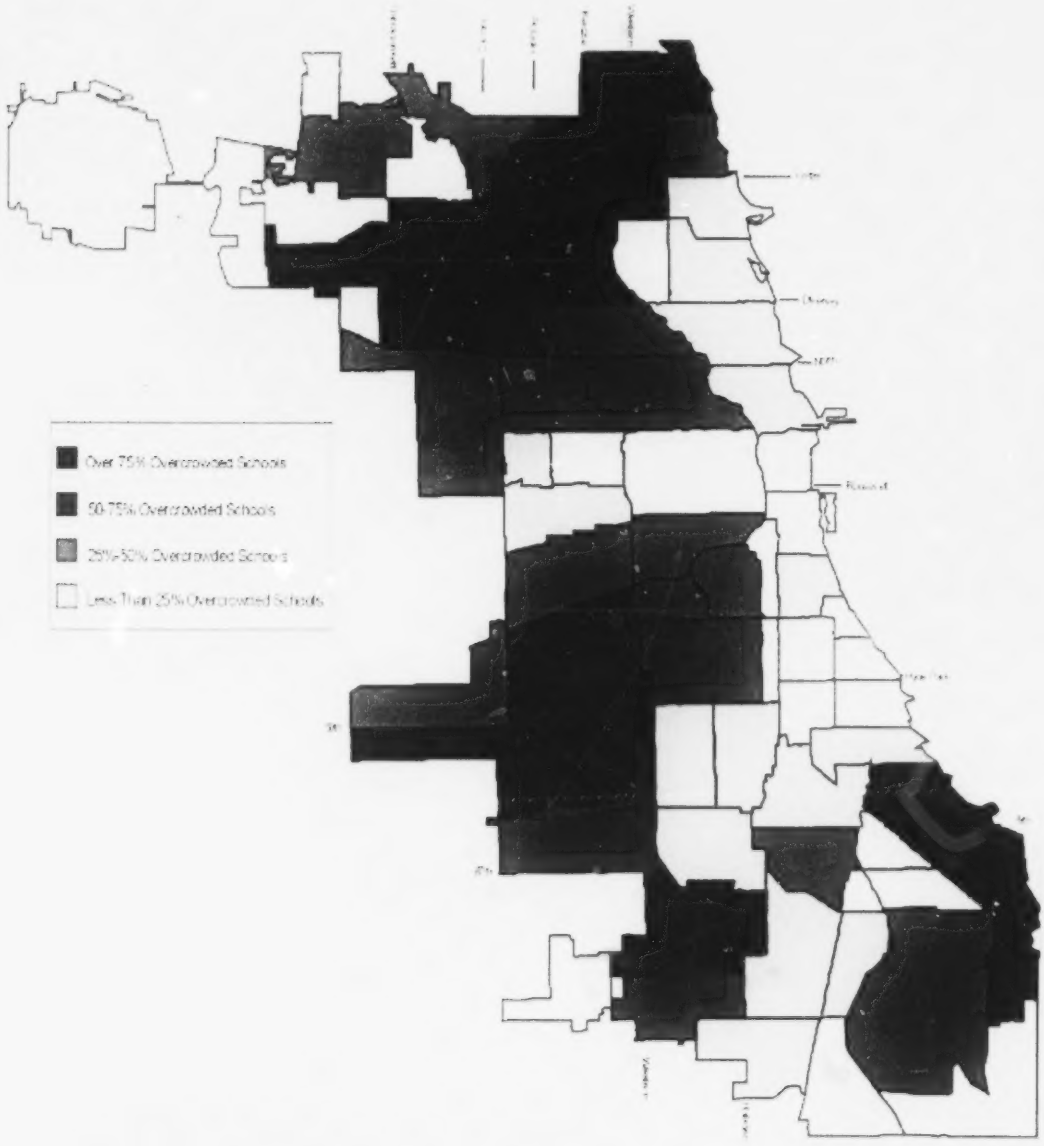
8. Building permit data came from Municipal Reference Section, Chicago Public Library, *Facts About Chicago*.

9. Chicago Public Schools, *1999-2003 Capital Improvement Program*, p7.

10. Fran Spielman, "Panel OKs new public high school on Far North Side," *Chicago Sun-Times*, March 6, 1998, p20.

11. National construction cost data comes from Paul Abramson, "1999 *School Planning & Management Construction Report*," available at http://www.spmmag.com/construction/Construction1999/intro.html. The figures in the study are based on a nationwide census of 100 percent of U.S. public school districts performed by Dun & Bradstreet's market research division.

Where Are Chicago's Overcrowded Elementary Schools?



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Chapter Three:

Chicago Elementary School Overcrowding

Unlike high school overcrowding – which saw some improvement during the 1998-99 school year, elementary school overcrowding actually is getting worse. This change is significant because just one year before, Chicago's elementary schools had seen their biggest drop in overcrowding in nearly a decade – from 154 schools in the 1996-97 school year to 144 schools in 1997-98. But by the 1998-99 session, overcrowding had again begun to creep upward, with 152 schools exceeding their target capacities.

While overcrowded schools can be found in many parts of the city, the most severe overcrowding appears to be on the Far Northwest, Southwest and Far Southeast sides (see map on page 46).

The drop in overcrowding during 1997-98 represented the first visible success of CPS's new construction program in battling overcrowding. That year, six additions and 24 annexes opened their doors – 12,278 additional seats in all – and the result was a significant drop in the number of severely overcrowded elementary schools.

> More than 131,000 Chicago elementary school students — 40 percent of the total — attended overcrowded schools during the 1998-99 school year.

But the 1998-99 school year also saw significant new construction activity. In all, four new elementary schools (two entirely new locations and two replacement school buildings), 13 additions, and four annexes opened their doors, representing 13,107 new seats. Despite these efforts, both the total number of overcrowded schools and the number of severely overcrowded schools actually increased. Some of the schools that had seen their overcrowding problem abate because of an addition or annex in 1997-98 again had to cope with the same problem for the 1998-99 school year. ***In fact, overcrowding in 1998-99 has almost returned to its 11-year peak.***

Why Did Overcrowding Increase in 1998-99?

While high school enrollments have been on the decline over the past few years, elementary school populations are exploding. The number of elementary school students has increased by 31,199 – 10 percent – since the 1988-89 school year. Most of that growth – over 21,000 students – has been in the past three school years. The 331,800 children who attended Chicago elementary schools during 1998-99 is the highest in any of the 11 years under study.[1]

Elementary School Overcrowding in Chicago

1998-99 School Year

80-99.9% Capacity	number of schools	101
	percentage of schools	22%
Above 100% Capacity	number of schools	51
	percentage of schools	11%
Total Overcrowding	number of schools	152
	percentage of schools	33%

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As elementary school enrollments grow, so have the number of students who attend overcrowded schools. With the exception of the 1997-98 school year – when the elementary school building boom led to a temporary dip – there has been a steady increase in the number of children who attend overcrowded elementary schools. ***During the 1998-99 school year, 131,027 children – 40 percent of all elementary school students – went to class in a building operating above its desired capacity.***

Many of these children attend schools that are chronically overcrowded. A total of 48 schools have been overcrowded for all 11 years under study. Some schools – 42 in all – saw peak or near-peak (within three percentage points) overcrowding levels during 1998-99, and 10 more became overcrowded for the first time in at least a decade. Overall, 275 schools saw their enrollments increase, while 183 saw declining numbers of students and four schools saw no change. (See Appendix Four for more details.)

48 Chicago elementary schools have been overcrowded for all 11 years under study. And because grade school enrollments are expected to grow, the problem is only expected to get worse in most Chicago neighborhoods.

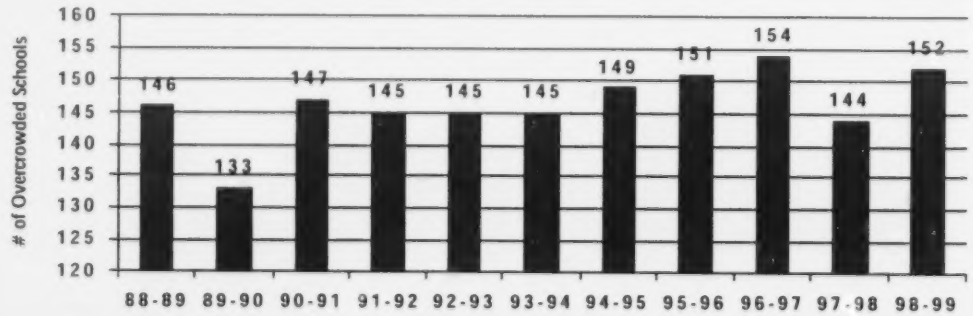
These trends have serious implications not just for elementary schools, but also for high school overcrowding levels. When these children graduate from eighth grade, Chicago's already-overcrowded high schools must be prepared to handle a wave of new students.

Will Elementary School Enrollments Continue To Grow?

The recent rise in elementary school enrollments is not a fluke. The number of students in Chicago's elementary schools will continue to rise for at least the next five years, and, if the number of children in the lower grades is any indication, probably for several more years after that.

According to projections from the Chicago Public Schools, the number of elementary school students is expected to rise in each of the next five years. Over that period, the total number of elementary school students (including pre-kindergarten, kindergarten, and special education) is expected to rise from approximately 331,800 during 1998-99 to 367,000 during the 2003-2004 school year. That represents about 35,000 additional students, or enough to pack 1,084 large classrooms.

Number of Overcrowded Elementary Schools in Chicago, 1988 to 1999



Chicago's experience mirrors nationwide trends. Schools across the country are beginning to feel the impact of the "baby boom echo" – the term given to the swell of new students currently entering U.S. schools. As the children of the unusually large baby boom generation reach school age, school districts – including Chicago – are having to find more and more classroom space. (For more information on the baby boom echo, please see Chapter Four).

One important thing to remember: even during the lean years, when elementary school enrollments were steady or declining, there was still an overcrowding problem. That problem persists today. ***Even if elementary school enrollments stayed exactly the same, Chicago would still have a serious overcrowding problem.*** The prospect that enrollments will increase quickly makes the problem appear even more daunting.

> About 34,700 additional students are expected to enter Chicago elementary schools over the next five years — enough to pack 1,084 large classrooms.

Of course, changes in birth rates are not the only thing that affects how many students are in the public school system. The next section examines some of the other factors that might affect elementary school enrollments in the coming years.

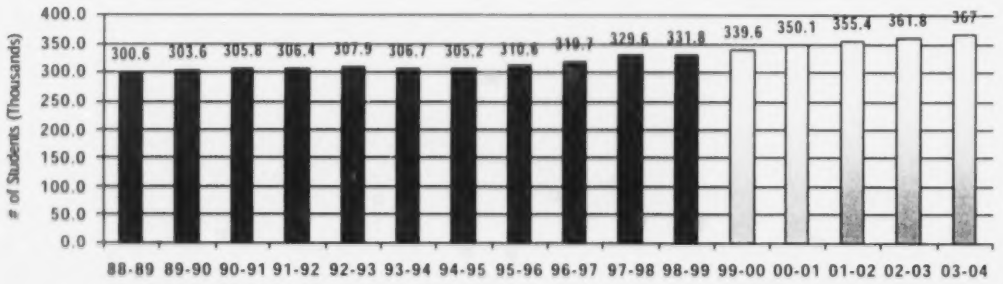
Other Factors Affecting Overcrowding

Besides demographic changes, there are a number of other trends that may affect elementary school overcrowding:

Shedding the "Image Crisis"

It's no secret that the Chicago suffered from a terrible (and largely deserved) image problem during the late 1980s, when its schools were branded the "worst in the nation." Nor is it news that Chicago has gone a long way toward shedding that image, winning accolades not only locally but also highly visible praise from the Clinton Administration. If CPS continues to make progress winning back the public trust, then parents will be less likely to look for other educational alternatives and more likely to send their children to public schools in the City. If and when more parents make the decision to send their children to the public schools, student enrollments could grow at a faster pace than in years past. As with dropout rates, educational improvements could create the need for still more new classrooms.

Elementary School Enrollment in Chicago, 1988 to 2003 (projected)



Source: Chicago Public Schools

Changing Private School Enrollments

Chicago has an extensive system of private schools at both the elementary and high school level, many of them administered by the Roman Catholic Archdiocese of Chicago. During the 1998-99 school year, the Archdiocese operated 273 elementary schools that enrolled 98,799 students throughout Cook and Lake County. Approximately 160 of these elementary schools were located within the Chicago city limits. Because the Archdiocese spreads beyond the Chicago city limits, many of these students live outside the Chicago Public Schools system. Still, Catholic schools divert a substantial number of students from the public school system and reduce the need for Chicago to construct more classrooms.

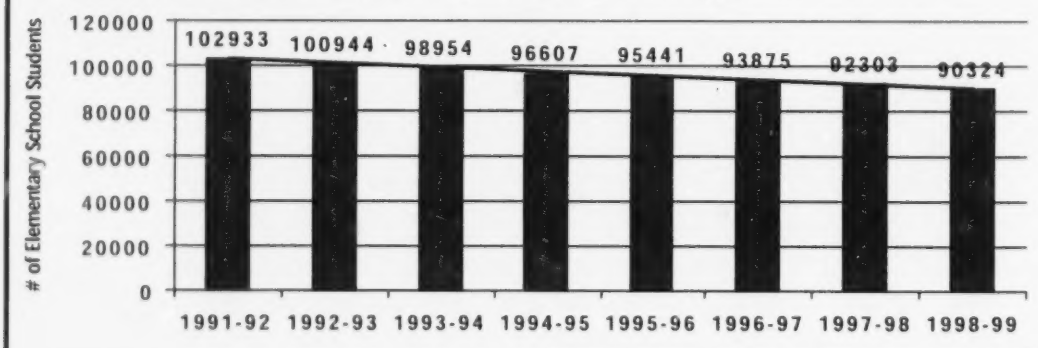
> Declining numbers of students attending private schools — such as those run by the Catholic Archdiocese of Chicago — could increase the number of students at public elementary schools.

Overall enrollment in Catholic schools (elementary and high school) has declined over the years, from 289,000 in 1965 to 122,494 in 1998. During that same period, the number of Catholic elementary schools declined from 429 to 273. In most City neighborhoods — with the exception of the Near North Side, Far Northwest Side, and Rogers Park — that decline is expected to continue in the coming years. In some of the Archdiocese's suburban areas — particularly those in the far north and far northwest portions of its territory — Catholic school enrollments are expected to grow.[2]

If current trends continue, the Chicago Public Schools may see more former Catholic school students entering its ranks, either because Catholic schools are shutting their doors or improvements in the public school system are attracting parents and children back to CPS. A 1996 task force report prepared by the Archdiocese identifies trends within its school system, and ways in which it can improve the marketing and services of Chicago's Catholic schools. In some areas, these efforts could affect enrollment and overcrowding levels at certain public schools.

Of course, there are other religiously affiliated schools in Chicago besides those administered by the Archdiocese, as well as private schools with no religious affiliation. While the decentralized nature of these schools makes it difficult to obtain consistent data, there is no doubt that the same sort give-and-take exists with the Chicago Public School system.

Enrollment in Catholic Elementary Schools in Chicago, 1991 to 1998



Source: Archdiocese of Chicago, Office of Catholic Education

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Changing Economic Climates

Changes to the City's economic climate are also likely to affect overcrowding. Good economic times has meant more residential construction within the City limits, some of which has taken place in areas such as the South Loop that traditionally has had very little residential space. As former commercial and industrial corridors "go residential," new schools might be needed in neighborhoods where before little or no need existed. Meanwhile, historically distressed neighborhoods are also rebuilding.

> The residential building boom in Chicago may increase the number of new classrooms that will be needed in the future.

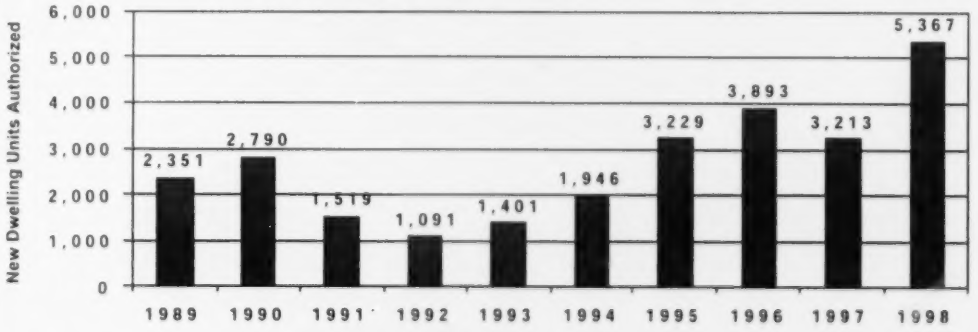
Evidence of the building boom is clear. In 1998, the City of Chicago authorized the construction of 5,367 new dwelling units – by far the highest level in any of the last 10 years, and more than twice as high as the number of new dwelling units authorized in 1989.[3] CPS and the City will have to work together to track and anticipate new housing development and the impact it will have on overcrowding.

Other Factors

There are many other factors that might have an effect on the severity and timing of overcrowding in the future. For example, retaining more students and ending social promotion — the practice of moving a student to the next grade regardless of academic performance — will change the number of students at each grade level, and ultimately affect when they reach high school. Changes to special education policy may also affect the effective capacity of each school.

Even the way schedules are designed could have an effect on overcrowding. Many schools, for example, use "split shifts" to minimize the number of students in the building at any given time. One group of students may begin school earlier and leave earlier, while other students may begin their day in late morning and go until later in the afternoon. Lunch periods are also spread out over several hours to minimize the required size of the cafeteria. In any case, it is important to understand that each change CPS makes to its daily school operations affects the way buildings are used.

New Dwelling Units Authorized, 1989 to 1998



Source: Chicago Public Library, Municipal Reference Section, *Facts About Chicago*

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Overcrowding: What Has Chicago Accomplished?

New construction in Chicago elementary schools — whether it be additions to existing buildings or brand-new facilities — is one of the most impressive accomplishments of the CPS Capital Improvement Program.

Even when funds are readily available, it is often difficult for school systems to efficiently manage the construction process and get projects done. As Chapter Four shows, some other school districts — such as Detroit and Miami — have stumbled in the early stages of their capital improvement programs. These districts have incurred the wrath of the public for failing to spend the money that voters authorized by approving bond issues. Faced with the daunting task of replacing, expanding, and modernizing hundreds of school buildings, these districts had a hard time getting the job started.

Chicago, by contrast, has jumped out of the gates — at least when it comes to new construction at the city's elementary schools. Between the time of the Capital Improvement Program's inception in 1996 and the 1998-99 school year, CPS has completed 16 additions, 27 annexes, and six new elementary schools (including one child-parent center). These 49 projects have come at a total cost of almost $344 million.

> Between 1996 and the end of 1998, the Chicago Public Schools completed 16 additions, 27 annexes, and six new schools — enough to accommodate about 20,000 additional students.

Perhaps even more impressive than the number of buildings built is the number of new seats created. The new classrooms built since 1996 are enough to seat an additional 23,000 students. During 1997-98 — the first year when a substantial number of new additions opened their doors — Chicago enjoyed the payoff of the program. Overcrowding dropped dramatically, even as elementary school enrollments rose. But as we have seen, that decline was short-lived. Even though more classrooms opened during 1998-99, the number of overcrowded schools shot back up.

Why did this happen? Later in this chapter, we will take a closer look at this question and begin to investigate possible solutions.

New Elementary School Classroom Capacity, 1996 to 1998

	Number	Additional Seats	Total Cost
Additions	**16**	**10,286**	**$185,075,566**
Annexes	**27**	**8,864**	**$64,911,528**
New Schools	**6**	**3,919**	**$93,596,274**
Total	**49**	**23,069**	**$343,583,368**

How Many New Elementary School Classrooms are Planned?

While the Chicago Public Schools Capital Improvement Program (CIP) certainly got off to a very promising start, it appears that the size of the program and the constant demand for resources is beginning to take its toll. Many projects are beginning to see delays creep into their construction schedules, or see their funding disappear entirely. Promises that had been made to construct a new school or build an addition now appear to be in limbo at some schools, and the future shape of the Capital Improvement seems more uncertain that it did just one year ago.

New construction projects were hardest hit by the changes in the CIP. NCBG compared the two most recent CIPs — one that covers the period between 1999 and 2003, and the most recent covering from 2000 to 2004 — in order to determine how the status of new construction projects changed as the capital program progressed. For the 93 elementary school projects, NCBG found that 54 projects had been delayed, 78 projects were listed as "unfunded," and four new construction projects were canceled outright. The dollar commitment to future elementary school construction declined by $715 million. ***Overall, just 16 percent of new construction projects are funded in the 2000-2004 CIP.***

How Long Will We Have To Wait For New Classrooms?

1999:
7 additions
1 new school
4 replacement schools

2000:
5 additions
1 new school
1 replacement school

2001-2004:
31 additions
27 new schools
16 replacement schools

While many of these projects are still on the books, they no longer have a firm funding source, and CPS has even shied away from disclosing to the public an estimate of how much each will cost. Only projects expected to be completed in the very near future have an identified funding source and cost estimate.

Still, despite the uncertainty, a substantial number of new classrooms are in the pipeline. Between now and 2004, CPS plans on constructing 29 new elementary schools, replacing 21 existing elementary schools, and building 43 new additions.

Changes to Planned Elementary School Construction, 1999 to 2004

	Additions	New Schools	Replacement Schools
Total # of Projects	**43**	**29**	**21**
# of Projects Delayed	**22**	**20**	**12**
# of Projects Unfunded	**34**	**27**	**17**
Change in $ Commitment	**- $190,152,775**	**-$328,100,000**	**-$196,640,000**

Have Past Capacity Additions Reduced Overcrowding?

Despite the building boom at Chicago's elementary schools, the number of overcrowded schools increased during the 1998-99 school year. Some of these overcrowded schools have already had a major addition or annex. The experience of these schools raises the question: How successful have capacity additions been in eliminating overcrowding?

To answer that question, we looked at the enrollment in elementary schools that have received capacity additions both one and two years after the addition was completed. (For more details, please see Appendix Six).

For the 63 schools with permanent capacity additions between 1988-89 and 1998-99, we found:

- 25 schools (40 percent) were overcrowded within one year of the new capacity going on-line. Of those, five were severely overcrowded.

- 29 schools were overcrowded within two years of the new capacity going on-line. Because some of these additions are very new, we only have this two-year data for 43 schools. That means that ***67 percent of the schools in our sample were overcrowded two years after the new capacity going on line***. Of those, 14 were severely overcrowded — above 100 percent of their *new* design capacity — within just two years after the new classrooms opened.

For example, Tonti School received a 384-student addition that opened for the 1997-98 school year. Before the addition was constructed, the school operated at 126 percent of its design capacity. The year the addition opened, the school was at 88 percent of its new design capacity. Two years after the addition opened, Tonti was again severely overcrowded at 100 percent of capacity.

These findings have important consequences for CPS capital planners. ***Elementary school enrollment is growing so fast – particularly in certain attendance areas where the most severely overcrowded schools are located – that new classrooms fill up almost as fast as they are built.***

While CPS should be commended for completing these new classrooms, the fact is that the capital program is just treading water in the face of huge tides of new students, not making real progress toward solving overcrowding. Until there is a sufficient number of classrooms in the neighborhoods where they are needed most, new additions — and even new schools — overcrowding may persist even at those schools that have already received additions.

- Two-thirds of the schools that received new classrooms were overcrowded again within two years of the additions opening their doors.
- Among those 29 schools, 14 became severely overcrowded — above 100 percent of their design capacity — within two years.

Are the Most Overcrowded Schools Getting Top Priority?

With so many overcrowded schools and such limited resources, there will necessarily be some schools that have to wait several years before they even see a project in the pipeline. CPS will have to make choices based on the schools with the most severe needs. But has CPS been successful in targeting the schools with the worst overcrowding problems in the additions they have built, and are they giving top priority for future construction projects to those schools with the worst overcrowding problems?

Of the 152 overcrowded elementary schools, 82 (54 percent) are expected to receive some sort of permanent capacity addition in the next five years. (For a complete list of planned capacity additions, please see Appendix Five.) Many of these are going to the most severely overcrowded schools. In fact, 42 of the 51 severely overcrowded elementary schools (82 percent) are scheduled to receive a capacity addition by 2004. This result is particularly interesting when compared to plans for capacity additions at future high schools, where three-fourths of severely overcrowded high schools do not have capacity additions planned.

There are additions planned at 14 schools that do not appear to be overcrowded. There are several possible explanations for this, beyond the possibility of negligence on the part of CPS planners. The design capacity figures released by CPS could be wrong or misleading. The schools receiving the addition may require some new non-classroom facility, such as a gym or a lunchroom. Or, additions at these underutilized schools could be designed to attract students from other, overcrowded schools nearby.

To more closely examine this question, NCBG mapped the location of planned, funded additions and compared them to the location of overcrowded schools. In general, NCBG found that planned additions are located in overcrowded areas of the City, though there are some cases that still warrant some further investigation.

The map also shows that a large area of the City's Northwest Side has a number of overcrowded schools but few planned, funded capacity additions. More work is needed to determine why this is the case, and what needs to be done to ensure that the needs of these schools are taken care of in a timely fashion.

It should be noted that the map looks at funded additions because those are those are the projects most likely to be completed in the near future. There are also a number of unfunded additions in the 2000-2004 CIP.

<u>82 of the 152 overcrowded schools (54 percent) are slated for more classrooms:</u>

- 30 schools are scheduled for an addition.
- 12 schools are scheduled for a new replacement school.
- 40 schools are slated for an additional new school within their attendance area.

<u>In addition:</u>

- 31 schools have already received some sort of permanent capacity addition within the past five years, but still face overcrowding problems.
- 41 schools have received modular units (some more than one) and seven have modular units planned.

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"Underutilized" Elementary Schools: A Possible Solution to Overcrowding?

At the same time that some elementary schools are dealing with crippling levels of overcrowding, other grade schools are operating at well below their design capacity. There are several possible reasons why this might be the case at a particular school. For example, the neighborhood may have changed significantly. Perhaps fewer children live in the area than in years past, or residential properties were converted to commercial, industrial, or institutional use. Parents might avoid sending their children to certain schools because of poor academic reputations, because the building is in poor condition, or because the school is located in an area with especially bad problems with gangs and drugs. Finally, it is possible that the school appears underutilized because the design capacity figure reported by CPS is substantially higher than the building allows in the "real world."

If there really are available seats at an apparently underutilized school, then there is a possibility that the available space may be used to help relieve overcrowding at another school. As discussed in Chapter One, forcibly busing students out of their neighborhoods in order to relieve overcrowding has been almost universally rejected as a policy option. But there may be some other solutions — such as adjusting the attendance boundaries of schools, or establishing specialty or magnet programs — that could make underutilized buildings part of the overcrowding solution.

There are 173 underutilized elementary schools (at or below 65 percent of their design capacity) in Chicago in the 1998-99 school year. These schools have room for an additional 53,698 students. In order to get a better idea of how underutilized schools might be used to reduce overcrowding, NCBG mapped overcrowded schools next to those schools operating at significantly below (65 percent or less) their capacity.

It appears that in some neighborhoods, there is a possibility that CPS might be able to take some advantage of underutilized schools to take advantage of nearby overcrowded facilities.

- In the Far Northeast, Far Southeast, and West Sides, there appears to be some opportunities to take advantage of underutilized schools to relieve overcrowding. In these areas, underutilized facilities are scattered among overcrowded schools, raising the possibility that adjusting attendance boundaries could make a real difference.

- In the Far Northwest and Far Southwest Sides, there are much higher concentrations of overcrowded schools. These facilities are much less likely to be near an underutilized school building.

> By looking at where overcrowded elementary schools are located in relation to underutilized facilities, it may be possible to find some creative, low-cost solutions to overcrowding.

How Much Will It Cost to Reduce Overcrowding?

While it is always difficult to speculate about the future, there is a pressing need to estimate how much it will cost to solve the overcrowding problem in Chicago's elementary schools. Knowing the scope of the problem makes it possible for elected officials, school planners, and the public to establish priorities and develop a strategy for solving it. Without a clear assessment of the situation, it is difficult if not impossible to craft a strategy for raising the money and getting the work done.

To estimate how much it will cost Chicago to solve its elementary school overcrowding problem, NCBG followed three steps:

Step One:
Determine the Number of "Overflow" Students That Need New Classrooms

As noted earlier, a school is considered overcrowded if it is at or above 80 percent of its design capacity. A 1,000-student school, for example, is overcrowded when it has 800 students or more. Any students above that figure are "extra" or "overflow" that school officials must find space for. If 900 students attended this 1,000-person, schools, for example, there would be an "overflow" of 100 students. Doing that same calculation for every overcrowded elementary school, we find that Chicago must find space for 90,199 additional students in order to eliminate overcrowding, assuming that no more students enter the system. Given that elementary school enrollments are expected to grow significantly, it is likely that the figure will be much higher.

Step Two:
Determine The Cost *Per Student* To Build A New Elementary School

The next step is to figure out the average cost per student of constructing a new elementary school. To do this, we looked at national statistics compiled by Wall Street analyst Dun and Bradstreet and published in the *School Planning & Management 1999 Construction Report*.[4]

To determine the cost per student of building a new elementary school, we took a combination of two measurements: the average cost per square foot, and the average number of square feet needed per student. By multiplying these two measures, we get a good average cost per student that we can use for the next step.

cost/sq. ft * sq. ft./per student = cost/per student

Alleviating overcrowding in Chicago's elementary schools through new construction will cost between $1.1 and $1.7 billion even if no additional grade school students enter the system in the next five years.

Construction costs vary from place to place based on the cost of materials in the region, the price and availability of labor, and many other factors. These costs tend to be higher in cities such as Chicago, so we used the higher end of our average cost scale to make our estimate.

Similarly, cities such as Chicago tend to have less space for school buildings, and consequently have to make them fit on smaller pieces of land. We therefore used estimates on the lower end of the square foot per student scale.

Estimate #1: Low End of the Range

The more conservative cost estimate uses:

- The average cost per square foot in the most expensive 25 percent of school districts ($125.00).
- The average number of square feet per student from lowest 25 percent of projects (100)

$125.00 * 100 = $12,500 per student

Estimate # 2: The High End of the Range

The more expensive estimate uses:

- The average cost per square foot in the most expensive 10 percent of school districts ($153.85).
- The median number of square feet per student of all school construction projects (120)

$153.85 * 120 = $18,462 per student

Step Three:
Calculating the Final Cost

Now that we know the cost per student and the number of students, we can calculate a range of estimates for how much it would cost to build enough new schools to alleviate overcrowding:

Low Estimate:

$12,500/student * 90,199 students = **$1,127,487,500**

High Estimate:

$18,462/student * 90,199 students = $1,665,253,938

Repairing and Improving Existing Elementary Schools

While new construction is a very important part of the elementary school capital plan, repairs and upgrades to existing buildings are also essential to the quality of life at Chicago's elementary schools. Unfortunately, the funding troubles, canceled projects, and delays that have plagued CPS' new construction efforts extend to the repairs and upgrades needed to make our schools safe and effective learning environments. These funding reductions were spread across most of Chicago's public elementary schools, not limited to a few special cases. ***In fact, 414 of Chicago's 522 elementary schools included in the CIP (79 percent) saw their expected capital allocation decline.*** Of those, 156 elementary schools saw their planned allocations reduced by $1 million or more.

Overall, six program areas (outside of the new construction categories) saw their allocations decline. Major capital renovations – the term CPS uses for repairs to windows, electrical systems, roofs, exteriors and other basic building elements – saw the largest decline — over $161 million. These projects did not tend to be eliminated outright. Instead, funding was revoked from the project, the start date was delayed until some point between 2001 and 2004, and no cost estimate was given to give the public a sense of the extent of the repairs needed. Still, these basic repairs are still technically "on the books" and await dollars from some future funding source.

By contrast, energy efficiency programs, almost across the board, were eliminated or delayed significantly – an apparent shift in policy by CPS.

Despite the widespread cuts to many categories of capital improvements, several programs did see an increase in their funding in the 2000-2004 CIP. Soundproofing projects — which are funded by the Federal Aviation Administration — saw their funding go up. Modular units also saw their allocations increase by over $7 million — an apparent reaction to the pressing short-term need at many schools to take immediate steps to ease overcrowding, if only temporarily.

Accessibility upgrades needed to comply with the Americans With Disabilities Act also saw their allocations rise, though this was largely because the size of existing projects grew beyond what was expected in the 1999-2003 CIP, not because new projects were added.

The current state of the elementary school Capital Improvement Program shows that there is fierce competition for dollars to fund not only new construction, but also basic repairs and upgrades. Until more funds are identified for school capital needs, school officials may continue to be forced into difficult choices about where their priorities lie.

Project Areas With Declining Allocations

Category	Change in Funding
Major Capital Renovations	($161,428,605)
Energy Efficiency	($136,683,335)
Swimming Pools	($3,700,000)
Educational Technology	($1,55,573)
Small Schools Initiative	($1,400,000)
Campus Parks	($291,738)

Project Areas With Increasing Allocations

Category	Change in Funding
Soundproofing	$8,615,957
Modular Units	$7,166,998
Accessibility Improvements	$3,401,642
New Playlots	$608,117
Science Lab Upgrades	$500,000

Where is All the Money Going?

As noted before, the Chicago Public Schools Capital Improvement Program has been successful in many ways. Through the 1998-99 school year, CPS completed $713.6 million worth of improvements at Chicago elementary schools.

The largest chunk of that total ($344.1 million) was for new construction (additions, annexes, and new schools). Close behind, CPS completed $307.9 million in "major capital renovations" — the basic repairs to school buildings such as fixing broken windows, leaky roofs, and drafty doors, as well exterior maintenance such as tuckpointing. When the Capital Improvement Program began in 1996, the first major emphasis was on stabilizing the exterior of the buildings to prevent further damage to the schools. The $7.4 million spent on energy efficiency projects also was aimed at fixing and upgrading the most basic heating, cooling, lighting, and electrical systems of the buildings. Many major capital renovations remain to be done, though the majority of these are inside the building, not part of the "exterior envelope" that was the focus of the first phase of the CIP's rebuilding and repair efforts..

> Basic repairs and new construction account for over 90 percent of the completed elementary school capital projects. Technology and other educational upgrades lag so far have lagged far behind on the Chicago Public Schools schedule.

CPS has also spent a significant amount of money — $24.7 million — on temporary modular classrooms aimed at easing overcrowding.

But the Capital Improvement Program is not aimed entirely at basic repairs or even new construction. Upgrading existing schools with modern facilities and "educational enhancements" such as computer technology and is also a major thrust of the program. It is difficult to track items such as technology enhancements, because many Local School Councils have purchased computers and raised grants on their own for technological improvements that don't show up in the CIP. In fact, only about $63,000 worth of completed educational technology projects are included in the 2000-2004 CIP.

Meanwhile, about $13.6 million has been spent on new playlots and campus parks. Finally, CPS has completed $12.4 million worth of projected aimed at soundproofing schools near airports — a project funded by the Federal Aviation Administration.

Completed Elementary School Projects Through the 1998-99 School Year

Project Type	Amount	Project Type	Amount
Major Capital Renovations	$307,860,785	**Energy Efficiency**	$7,377,581
Additions/Annexes	$250,512,094	**Accessibility Improvements**	$1,767,846
New Schools	$93,596,274	**Improved Public Safety**	$809,589
Modular Units	$24,689,196	**Small Schools Initiative**	$793,514
New Playlots/Campus Parks	$13,598,128	**Educational Enhancements**	$200,000
Soundproofing	$12,351,113	**Educational Technology**	$63,451

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But as the Capital Improvement Program moves into its fourth school year, the difficulties of planning and completing so many projects is beginning to take its toll. The latest CIP — which covers the period between 2000 and 2004 — reveals that CPS has overextended itself with the promises it made to many schools. In fact, just in elementary schools, almost $282 million worth of projects have been eliminated from the CIP.

Eliminated Projects

The perceived need to eliminate certain projects from the CIP hit energy efficiency initiatives the hardest. Over $134 million worth of energy efficiency projects were eliminated outright from the CIP. Just over $69 million worth of basic repairs were cut from the budget, along with almost $63 million worth of new construction projects (including additions, conversions, and new schools). Even projects intended to bring Chicago schools into compliance with the Americans With Disabilities Act were cut, with $11 million worth of these ADA projects disappearing in the 2000-2004 CIP.

Is CPS Reaching Its Limits?

$282 million worth of elementary school projects were eliminated from the CIP.

Another $332 million of elementary school projects saw their funding revoked in the 2000-2004 CIP.

Projects With Funding Cuts

In addition to the projects that have been eliminated outright, there are a number of projects that have seen their funding revoked. These projects — which had been listed as "funded" in the 1999-2003 capital plan, now are listed as "unfunded." Without a concrete funding source, the future of these projects is up in the air.

Overall, 59 previously funded elementary school projects saw their funding source disappear. These projects represent a decline in planned capital spending of over $331.7 million — a substantial change by any measure. The greatest share of this — $224.7 million came in the area of new school construction. The next largest declines came in the areas of additions ($69.5 million) and major capital renovations ($34.5 million).

Changes to the Elementary School Capital Program, 1999-2003 to 2000-2004 CIP

Eliminated Projects

Energy Efficiency	($134,285,977)
Major Renovations	($69,295,121)
New Construction	($62,850,000)
Accessibility Imp.	($11,110,000)
Modular Units	($1,968,500)
Educational Tech.	($1,186,549)
Campus Parks/Playlots	($730,000)
Small Schools	($200,000)

Projects That Lost Funding

New Schools	($224,700,000
Additions	($69,500,000)
Major Renovations	($34,399,424)
Energy Efficiency	($1,609,000)
Small Schools	($1,200,000)
Educational Tech.	($200,000)
Accessibility Imp.	($100,000)

End Notes

1. Enrollment data prior to the 1998-99 school year is taken from the Office of School Financial Services, *Chicago Public Schools Comprehensive Annual Financial Report for the year ended June 30, 1998*, pp. 136-137. Enrollment data for the 1998-99 school year is taken from the CPS Office of Accountability, Dept. of Compliance, *Student Racial/Ethnic Survey Reported As of September 30, 1998*, p. xi.

2. Enrollment data for Chicago's Catholic schools was provided to NCBG by the Archdiocese of Chicago's Office of Catholic Education. NCBG also drew on a report by the Archdiocese's Special Task Force on Catholic Schools, *Final Report*, Summer 1998.

CPS enrollment projections for the 1999-2000 through 2003-2004 school years were provided to NCBG by the Office of Capital Planning.

3. Building permit data came from Municipal Reference Section, Chicago Public Library, *Facts About Chicago*.

4. National construction cost data comes from Paul Abramson, "1999 *School Planning & Management Construction Report*," available at http://www.spmmag.com/construction/Construction1999/intro.html. The figures in the study are based on a nationwide census of 100 percent of U.S. public school districts performed by Dun & Bradstreet's market research division.

Chapter Four:

The National Problem

The problems of overcrowding and crumbling school buildings are not confined to Chicago. Most of the nation's major cities are struggling to find ways to pay for badly needed school improvements. Rural and suburban school districts also are scrambling to cope with aging facilities and rapidly expanding student populations. No corner of the country can escape these challenges.

This chapter compares Chicago's experience to that of the rest of the country, both in terms of school repair and overcrowding. First, it summarizes the growing evidence that there is a national need for more and better school facilities to keep pace with aging buildings and growing enrollments. Then, we present a series of case studies examining the nature of other cities' problems and some of the solutions under consideration. Finally, in the conclusion to this report, we summarize congressional reform proposals and discuss why a national strategy is needed to rebuild our crumbling schools.

Schools in Disrepair

The most comprehensive assessment of the country's school facilities was completed in February 1995 by the U.S. General Accounting Office at the request of five U.S. Senators.[1] The GAO report estimated that the nation needs to invest approximately $112 billion in order to make basic repairs.[2] While the report found that two-thirds of the nation's schools were adequate, 14 million students (about 30 percent of all U.S. students) attended the other 25,000 schools in serious disrepair. Furthermore, 60 percent of all school buildings reported that at least one major building feature needed to be repaired or replaced. These finding confirm the general conclusions of two earlier studies on the condition of America's schools.[3]

The GAO study attributes the poor condition of many school buildings to years – and in some cases decades – of deferred maintenance:

> District officials we spoke to attributed the declining physical condition of America's schools primarily to insufficient funds, resulting in decisions to defer maintenance and repair expenditures from year to year. This has a domino effect. Deferred maintenance speeds up the deterioration of buildings, and costs escalate accordingly, further eroding the nation's multibillion dollar investment in school facilities.[4]

The U.S. General Accounting Office estimated in 1995 that . . .

- The nation needs to invest approximately $112 billion in order to make basic repairs to its schoolhouses.
- While two-thirds of the nation's schools were adequate, 14 million children (about 30 percent) attended the other 25,000 schools in serious disrepair.
- 60 percent of all school buildings reported that at least one major building feature needed to be repaired or replaced.

Importantly, the GAO found that older schools were not necessarily in worse condition that newer ones. "While some studies cite building age as a major factor contributing to deteriorating conditions, older buildings often have a more sound infrastructure than newer buildings," the report concludes. "Buildings built in the early years of this century – or before – frequently were built for a life span of 50 to 100 years while more modern buildings, particularly those built after 1970, were designed to have a life span of only 20 to 30 years."[5]

> U.S. public school enrollments have set record highs for 14 straight years.

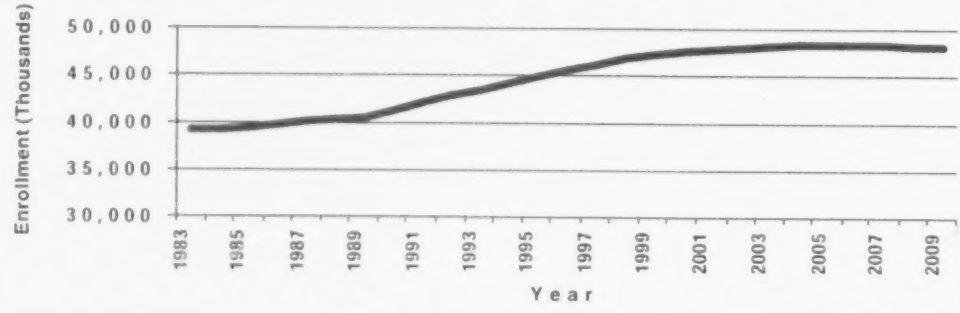
In all, the GAO released seven reports on school buildings between February 1995 and June 1996 covering topics such as finance, technology, school design, and accessibility for students with physical disabilities.[6] In the wake of these reports, there was a rash of articles in newspapers and educational journals highlighting the condition of America's schools and the connection between good buildings and good education. The GAO reports – together with the heightened media attention – formed the basis for the Clinton Administration's 1998 legislative push for more federal funds for school construction. This legislative initiative will be discussed in the conclusion to this report.

Overflowing Classrooms

While there have been several studies of the physical condition of school buildings, there is no comprehensive, nationwide assessment of school overcrowding. The GAO reports limit themselves to such issues as basic maintenance (windows, doors, roofs), environmental dangers (lead paint, asbestos, underground storage tanks), accessibility issues, and technology limitations. The GAO made no attempt to analyze whether schools were overcrowded, or to estimate how many new classrooms would be needed to ease overcrowding. The Senators' decision to exclude overcrowding from the analysis means that **the true cost of rebuilding America's schools is far higher than the $112 billion estimate advanced by the GAO in 1995.**

While no comprehensive report exists documenting the national overcrowding problem, the U.S. Dept. of Education has tracked growing student enrollments the past four years in a series of reports titled *The Baby Boom Echo*. The latest update to the report – released in August 1999 – documents a nationwide enrollment explosion and urges immediate action to assist states and municipalities in their fight against inadequate school facilities.

U.S. Public School Enrollments, 1983 to 2009 (projected)



Source: U.S. Dept. of Education

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School enrollments have increased for 14 straight years, the U.S. Dept. of Education reports. In each of the last four years, enrollments have set a new record high. Nationwide elementary and secondary school enrollment for the 1999-2000 school year is expected to top 53.2 million students – 447,000 more than the previous year. The growth shows no sign of letting up anytime soon. The Dept. of Education's analysis predicts seven more years of increasing enrollments followed by a brief plateau. Then, student populations will begin to grow again:

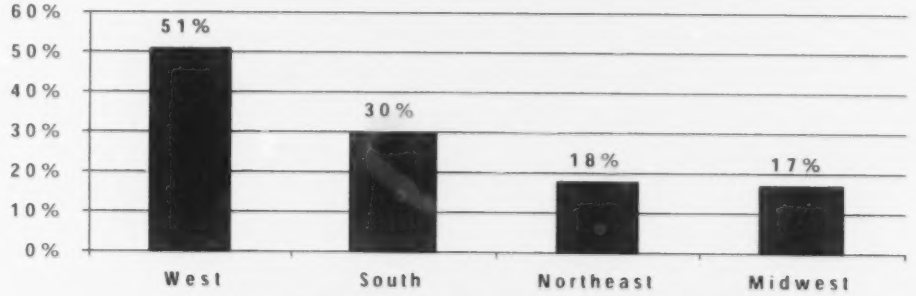
> There is no short-term fix to the very long-term condition of increasing enrollment in our nation's school systems. While many school districts are using portable classrooms and resorting to double sessions, the fact remains that this nation simply has to build more schools. . . . A strong future perspective also suggests that we should be looking down the road to recognize that the children who make up the current baby boom echo will, in time, begin to have their own children and families. This is why it is so important for this nation to build new schools that will last for decades and truly be centers of community and learning for all Americans.[7]

Fastest Growing School Districts, 1987 to 1997

District	Enrollment Increase	% Change
New York City	131,920	14%
Dade County (Miami), FL	92,635	37%
Los Angeles Unified, CA	91,119	15%
Clark County (Las Vegas)	90,795	91%
Broward County FL	87,433	64%
Chicago, IL	58,073	14%
West Palm Beach, FL	52,780	55%
Orange County, FL	44,948	51%
Greensboro, NC	35,919	150%
Lawrenceville, GA	35,462	61%

The overcrowding problem is not limited to a single area of the country, though student populations are growing more quickly in the West and the South. Nor is it limited just to cities, suburbs, or rural areas – most school systems, regardless of their size, are finding that they have more students than they have classrooms to put them in. The Midwest and the Northeast expect to see their student bodies grow about 18 percent between 1999 and 2009. The South expects growth rates of about 30 percent during that period, and the Western states will have to cope with a growth rate of just over 51 percent.[8]

Public School Enrollment Growth, By Region, 1989-2009



Source for both charts on this page: U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*

The Rush to Build

All across the country, school districts are scrambling to keep up with the need to build new classrooms and modernize existing buildings. These projects come with a big price tag. The average elementary school constructed in 1998 cost about $7.6 million, the average middle school cost about $12.7 million, and the average high school topped $20.7 million.[9]

While the amount U.S school districts are able to invest in their capital investment programs continues to fall well short of the need, their expenditures are nonetheless impressive. In 1998 alone, U.S. public school systems completed $17.1 billion in capital improvements, $13 billion of which went toward new schools and additions. Between 1999 and 2001, these districts are expected to invest another $46.4 billion in their school districts.[10]

How Much is Really Getting Built?

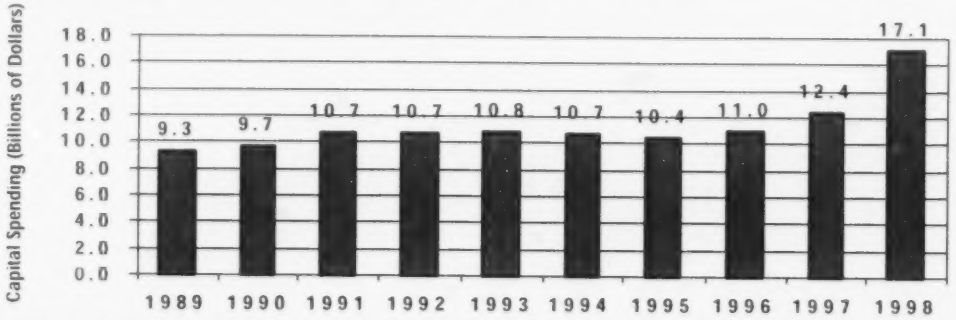
	1998 (Completed)	1999-2001 (Projected)
New Schools	$7.9 billion	$21.6 billion
Additions	$5.1 billion	$12.6 billion
Modernization	$4.1 billion	$12.2 billion
Total	$17.1 billion	$46.4 billion

Over the last decade, the amount spent on school improvements has increased dramatically, from $9.3 billion in 1989 to $17.1 billion in 1998 – an increase of 84 percent. During that period, public school districts have invested a total of $113 billion in school construction and repair.[11]

Still, despite the increase, there remains a dramatic shortfall – even if we use the U.S. General Accounting Office's conservative $112 billion estimate as the benchmark. Of the $17.1 billion in capital funds spent in 1998, 76 percent went to new schools and additions, leaving only about $4.1 billion for the deferred maintenance dealt with by the GAO. This represents an increase from the previous three years, where the amount that went toward school modernization hovered around the $2.7 billion mark. Still, since the GAO report was released in early 1995, ***U.S. school districts have only made about $12.2 billion of the $112 billion worth of improvements identified by the GAO — just 11 percent of the total.***

While substantial national data exists on planned and completed school capital expenditures, there still is no systematic, up-to-date assessment of the need for new classroom capacity. Such a study would be a massive undertaking, but it would shed light on just how widespread the overcrowding problem really is. Until then, policymakers will need to rely on the wealth of anecdotal evidence detailing current conditions as well as the projections of another decade of continued enrollment growth.

U.S. School Construction and Repairs, 1989 to 1998



Source for both charts on this page: *American School and University* "25th Annual Official Education Construction Report."

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Tales From the Front: Stories From Around the Nation

Despite the absence of a nationwide overcrowding assessment, there is an abundance of anecdotal evidence that the one-two punch of overcrowding and deferred maintenance is a crippling problem in many school districts.

New York City:

New York City is the nation's largest and fastest growing school district. It is also the school district for which the most research on overcrowding and capital improvements has been done. The City's school system enrolls almost 1.1 million students, and grew by more than 130,000 students between 1987 and 1997.

> As the nation's largest and fastest growing public school system, New York City faces some of the toughest school construction challenges.

At the beginning of the 1990s, New York City's school buildings were facing a crisis. Almost half of the system's 1,006 school buildings were operating at above 100 percent capacity. Overcrowding was worst at the secondary education level – 71 percent of high schools were overcrowded – though 51 percent of elementary schools and 24 percent of middle schools were above capacity as well.[12]

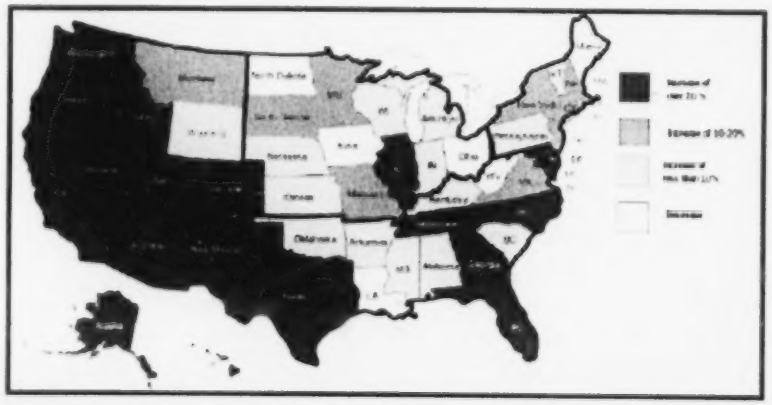
At the beginning of the decade, New York also suffered from crumbling school buildings. In addition to being technologically deficient, 83 percent of the buildings needed capital repairs and 314 buildings required complete modernization. The system's maintenance need was estimated at $5 billion – 13 times larger than the system's 1990 capital budget.[13]

Beginning in 1990, New York undertook a major capital investment program that resulted in almost $5 billion in maintenance and new construction expenditures between 1990 and 1996. About 38 percent of the funds went to new construction, resulting in a 5 percent increase in the system's seating capacity.[14] But despite this intensive investment strategy, New York was unable to keep up with the rapidly growing enrollment:

> The school system was overmatched by the surge in enrollment in the 1990s. An already bad situation was made worse by the Board and the City's policies of reducing spending per student and not pursuing more productive deployment of teachers and more intensive use of school buildings. Consequently, despite record levels of capital investment, crowding worsened and facilities became more deteriorated.[15]

Enrollment Growth by State, 1989 to 2009

The number of school children is increasing coast to coast, not just in the South and West.



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In a 1996 report, the Citizens Budget Commission found that despite the $5 billion in capital investment planned for the first seven years of the 1990s, there was no appreciable change in overcrowding. Half of all elementary schools, one-fifth of all middle schools, and two-thirds of all high schools remained overcrowded. In 1997, New York expanded its capital improvement program from $8.6 billion over 10 years to $10 billion over the same period, but CBC didn't expect that to be enough either.

"Even with this additional investment, only half of the work necessary to bring schools into a state of good repair would be completed, enrollment soon would exceed capacity by as much as 186,000, and only one out of nine schools could be provided with the educational and technological enhancements necessary to support new pedagogical approaches," the report concludes.[16]

In February 1994, then-Chancellor of the New York City Board of Education Ramon Cortines created the Citizens Commission on Planning for Enrollment Growth. One year later, the commission released a set of 11 recommendations for how the school system should proceed. In general, these recommendations focused on alternatives to the intensive capital investment that the School Board had been pursuing, including:

- Extend the school system to a year-around schedule, which the commission contends will increase the capacity of a 750-student building, for example, to about 1,000 students because part of the student body will be on vacation at any given time.
- Focus on leasing more school buildings rather than constructing new ones.
- Make better use of underutilized schools, including changing attendance zones when necessary and locating magnet and specialty schools in facilities with excess capacity.
- Look for partnerships with non-traditional educational outlets for "out-of-school learning environments," including colleges and universities and non-profit institutions. The commission also recommends investigating the possibility of using vacant commercial space for schools.

In addition to these non-traditional approaches, the commission also recommended that New York provide a dedicated revenue stream to fund school construction bonds and pursue more federal funding for school capital needs.[17] So far, New York has pursued more conventional approaches to fighting overcrowding instead of the more systemic changes recommended by the Commission, including a prototype schools program that school officials say makes construction faster and cheaper.

In a 1996 report, New York City's Citizens Budget Commission found that despite the $5 billion in capital investment planned for the first seven years of the 1990s, there was no appreciable change in overcrowding in the New York City school system.

Miami-Dade County, Florida

As the second-fastest-growing school system in the country, the Miami-Dade County public school system has received considerable attention for its school construction needs. According to the U.S. Dept. of Education, Dade County saw an increase of over 92,000 students between 1987 and 1997 – a 37 percent increase.[18] Some estimates place the district's capital need as high as $11.1 billion.[19]

The first major effort to combat school overcrowding and repair in the district came in 1988, when voters approved a $980 million school bond issue – at the time, the largest school bond in U.S. history. School officials at the time predicted the money would fund a five-year capital improvement program that would result in 250 school renovations and 49 new school buildings. By 1994, a *Miami Herald* study found that 731 construction projects were on the books, and less than half of the 49 promised new schools had been constructed. The cost of the program, the paper reported, had already jumped to almost $1.7 billion.[20]

Overcrowding is a problem throughout Florida. The U.S. Dept. of Education reports that seven of the 25 fastest-growing school districts are located in Florida counties. Government officials have tried to sidestep the size of the problem with sleight-of-hand. In 1997, the Florida legislature passed a bill that would require all school districts to count three-quarters of their portable classrooms – as well as all music rooms, art rooms, and computer labs – as permanent, regular classroom space.

State officials believe that by that measure, Florida's school construction "need" could be as little as $775 million. The law was roundly criticized. "The bill is an attempt to hide the problem," said a spokesman for the Florida Education Association United. "Everyone's doing a lot of denying and finger-pointing, but the bottom line is, we've got overcrowding."[21]

Los Angeles, California

The Los Angeles Unified School District – which includes not only the City of Los Angeles, but also schools in 11 towns and portions of 18 other municipalities – is the nation's third-fastest growing school district. According to the U.S. Dept. of Education, Los Angeles saw an increase of over 91,000 students between 1987 and 1997 – a 15 percent increase.[22]

School officials in Miami-Dade County, Florida, promised the money from a $980 million school bond would fund 250 school renovations and 49 new school buildings. By 1994, a *Miami Herald* study found that less than half of the promised new schools had been constructed and the cost of the program had jumped to almost $1.7 billion.

With almost 700,000 students in elementary and high schools, LAUSD has acknowledged the need for a major building campaign. To address these concerns, L.A. voters in April 1997 approved a $2.4 billion construction and repair bond issue known as "Proposition BB." About $900 million of the money will be used to match state funds, help alleviate what Superintendent Ruben Zaccarias calls a "chronic" overcrowding problem, and reduce the number of students that must be bussed to less-crowded facilities.[23]

Los Angeles schools can draw on a variety of sources to meet their capital needs in addition to general obligation bonds such as Proposition BB:

- **Special Local ("Mello-Roos") Bonds:** School districts in California are authorized to form special districts – sub-areas within the main school district – that have the authority to issue school construction bonds. The bonds are then paid with additional taxes levied on the property within these special sub-districts.

- **State Funding:** Much of California school construction and repair funding comes from a state-local partnership called the State School Building Lease-Purchase Program. Eligibility for state funds is based on the number of "unhoused children" in the district, with priority given to school districts that provide 50 percent of the cost of the project and agree to meet some requirements for year-around education at the school. Between 1986 and 1996, California voters have approved $8.8 billion in state general obligation bonds for school capital needs. Passing a state bond issue requires a 50 percent majority in a referendum.

- **Developer Fees:** School districts are authorized to impose developer fees on new residential construction. These fees may be used only for the construction and reconstruction of school buildings. LAUSD has taken this idea a step further with its Facilities Task Force. The Task Force is considering incentives for private developers to include schools in their housing and commercial development plans. In addition, the Task Force has considered tying school capital investment to transit-oriented development in the Los Angeles area. These initiatives seek to leverage public and private investment in unique ways that do not overburden limited school district resources.

- **Parcel Taxes:** School districts throughout California are authorized to impose "parcel taxes" on property within the district, provided the tax rate on each type of property is the same – provided that the tax is approved by at least two-thirds of voters in the district. Senior citizens may be exempted from the additional tax burden. Proceeds from the tax may be used for services and facilities.

California is trying to meet its school construction needs through a combination of state and local funding methods, as well as innovative strategies such as developer fees. Local school districts in California can impose fees on new residential development to help pay for the cost of building the schools that will serve the new residents.

Las Vegas/Clark County, Nevada

Measured in terms of the number of new students, the Las Vegas/Clark County school system is the fourth-fastest growing school district in the country, with almost 91,000 new students between 1987 and 1997. That translates into a 91 percent increase – the fastest growth rate of any school district with over 100,000 students.[24] The pressure on schools is a reflection of the tremendous growth of the city itself:

> Two hundred new residents arrive in Las Vegas every day; a house is built every 15 minutes. Last year alone, the city issued 7,700 residential building permits, plus permits for $200 million worth of commercial construction – enough to build a good-sized Midwestern county seat from scratch.[25]

> Las Vegas voters have approved over $5 billion in school construction bonds since 1988.

But unlike Miami, Las Vegas is pulling together to try to meet its school-construction needs – though, of course, it hasn't always been easy. Nine new schools were scheduled to open in August 1999 – five elementary schools, one middle school, and three high schools. Clark County taxpayers have approved four school bond issues since 1988: $600 million in 1988, $605 million in 1994, $643 million in 1996, and $3.5 billion in November 1998. These two bond issues are expected to finance the construction of 41 new schools. In fact, since the 1994-95 school year, 32 new schools have opened in Clark County.[26] The most recent bond issue is expected to continue the building boom by providing enough money to construct 88 new schools.[27]

The 1994 and 1996 bond issues were pushed through in large part by the business community, which pushed hard to overcome voter reluctance to the huge spending packages. Developers, casinos, telephone and power companies, banks and hotels contributed a total of $750,000 in cash to convince voters to vote for the bonds when the referendums came up. In-kind contributions added hundreds of thousands of additional dollars to the campaign. For example, the Hughes Corp. contributed a campaign headquarters and paid for public service announcements on the issue. Business executives went on the lecture circuit in support of the initiative, and one car dealership even devoted his marquee to advertising the cause. Gas stations were recruited to hang banners urging a pro-bond vote, and students were organized to speak with senior citizens about the need for new schools. Parents, scout troops, and high school track teams fanned out on "Doorknobber Weekend," hanging 200,000 brochures on people's front doors. The campaign was successful.

> Business leaders in Las Vegas — realizing that they needed good schools to have qualified workers in the future — helped to build support for school construction bonds by donating both money and time to the cause. Their backing persuaded many voters to overcome their reluctance to approve the huge spending packages.

For the 1994 bond referendum, 24 of the county's top executives formed a political action committee. These companies stressed that they have a major stake in the school district's performance because they believe Clark County businesses need better access to a well-educated workforce. Joyce Halderman, coordinator of the district's campaign, said the strategy is to "admit mistakes, toss negatives back to the community by asking for help, and keep the message focused on kids and crowding." The local organizing campaign even included television ads designed to sell the public on the need for the bonds. One commercial showed children playing musical chairs around a cluster of school desks. As "Pop Goes the Weasel" blared, more and more kids joined the group, climbing over each other just to get a seat.[28]

Funding proposals for schools – and other infrastructure needs in the rapidly growing county – may begin to become more controversial in the coming years. Former Las Vegas Mayor Jan Laverty Jones and state Sen. Dina Titus are beginning to push the notion that developers should pay "impact fees" and share the costs of the basic infrastructure that must be put in place to accommodate the population boom. While these fees could provide a windfall to the school district, winning such concessions will inevitably come at the end of a protracted fight.[29]

Detroit, Michigan

While the Detroit school district is not among the nation's fastest growing systems, it does illustrate an important point: even older Midwestern cities – those generally lumped together under the title of the "Rust Belt" – face significant overcrowding and capital needs. Aging buildings and changing student populations mean that even cities that aren't growing quickly may face serious capital improvement problems in their schools.

Detroit appeared to be on the right track in 1994 when voters approved a $1.5 billion bond issue for school construction and renovation. The size of the bond issue was at the time the largest in U.S. history, surpassing the $980 million bond issue approved by Dade County, Florida, voters in 1988. The bond was intended to fund renovations and technology upgrades at all 263 Detroit schools, as well as constructing at least another dozen new schools over the course of a decade.

But as late as 1997, no work had begun on the construction campaign. "It's a joke," said Marie Thornton, a parent activist and former member of the public commission appointed to oversee the construction initiative. "We don't have any buildings, we don't have any workmen, you don't see a brick laid."[30]

While the Detroit school district is not among the nation's fastest growing systems, it does illustrate an important point: even older Midwestern cities – those generally lumped together under the title of the "Rust Belt" – face significant overcrowding and capital needs. Aging buildings and changing student populations mean that even cities that aren't growing quickly may face serious capital improvement problems in their schools.

Since that time, Detroit has begun to get its capital program on track. Detroit Schools CEO David Adamany, in a "Preliminary School Improvement Plan" dated July 1999, called for a rethinking of the city's bond program:

> The Detroit Public Schools should review and revise the bond issue program to take into account major considerations that were not fully considered in the original bond plans. These considerations include (1) population and enrollment trends in Detroit, (2) the City of Detroit's plans for expansion of residential development in certain parts of the City as well as plans to diminish residential living in areas designated for industrial and commercial activity, (3) construction of new facilities too replace, rather than to repair older buildings . . .

The plan also calls on the school district to establish prototype schools to reduce costs, develop better construction standards and uniform security infrastructure, and establish a consistent program for improving technology infrastructure.[31]

The School Improvement Plan concludes that in general, "the bond program authorized by the people of Detroit has not been effectively implemented." Of the $1.5 billion authorization, only $310 million in bonds had been issued as of July 1999. Approximately $170 million of that has been spent or committed, and another $50 million in expenditures has been authorized for emergency repairs during summer 1999. "The district therefore has substantial bond proceeds . . . still available and has very significant additional bonding capacity to address the serious facilities conditions in the Detroit schools."[32]

While the Detroit schools have begun to get a handle on long-overdue basic maintenance, little has been done to ease overcrowding. About 4,400 students attend 70 overcrowded schools in the city, but 186 are operating below their capacity. These underutilized schools have an excess capacity of 44,100 seats. The plan calls busing a "feasible temporary alternative," but is quick to say that such a policy "does not constitute a good long-term educational solution." The school district is considering closing some school buildings and finding ways to make better use of available classroom space.[33]

Detroit's school improvement program has been slow to get off the ground. Of the $1.5 billion in school construction and repair funds authorized by voters, only $310 million in bonds had been issued as of July 1999. Just $170 million had actually been spent on school improvement projects.

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States, Municipalities Seek Out Innovative Funding

The Federal Government cannot – and should not – pick up the entire tab for school construction and repair. School finance has traditionally been the territory of local and state governments, and they should continue to play a primary role in funding capital improvements. In the absence of federal support for school buildings, many state and municipal governments have stretched their limits and devised innovative financing techniques that, when paired with federal construction dollars, may go a long way toward overcoming their massive funding shortfall.

The previous section looked at how some of the larger school districts are finding ways to finance their school capital needs. But smaller school districts often have pressing capital needs as well, and even in these communities the cost of building and modernizing schools has stretched into the tens of millions of dollars. Faced with a smaller tax base – and often saddled with rapid population growth that presents a number of infrastructure problems that stretch beyond just school construction – these municipalities often have a harder time raising money through conventional methods such as local general obligation bond issues. Vast disparities in property values between wealthy and poor districts often make it difficult or impossible to pass bond issues. Phil Fox, associate director of the Colorado Association of School Executives, said that weak tax bases keep many school districts from even considering a bond-issue referendum. "most of them know damn well they can't pass a bond issue," Fox says, "and they don't even bother to have them."[34]

Meeting the needs of these communities often requires coordinated issues at the state or county level. The remainder of this chapter includes several examples of how smaller school districts have sought to address their funding needs.

Broward County, Florida: *State Funding Comes Through*

By comparison with a city such as New York or Chicago, Broward County's 225,000 students seems relatively small. But the county – which includes Fort Lauderdale – is the nation's fifth fastest-growing school district, having added more than 87,000 students to its ranks between 1987 and 1997 – almost 30,000 more than Chicago added during that same period.[35] This 64 percent increase in student enrollment has earned Broward County's school funding woes national attention, and forced the district to aggressively pursue sources of funds to pay for its school capital needs.

In the absence of federal support for school buildings, many state and municipal governments have stretched their limits and devised innovative financing techniques that, when paired with federal construction dollars, may go a long way toward overcoming their massive funding shortfall.

Florida's 1998 legislative session ended with some creative strategies for helping Broward County public schools reap some of the financial benefits of a strong economy and a successful lawsuit against the tobacco industry. As a result of a special legislative session in November 1997 and the regular 1998 legislative session, Broward County schools will receive more than $361 million in additional school funding. That includes about $282 million earmarked for new school construction and overcrowding relief, and another $79 million to support future enrollment increases, salary issues, and program improvements. The increase was made possible by a successful $11.4 billion lawsuit against the tobacco industry. Some of these dollars will be used to pay for health services normally supported by state general revenues. Those funds can, in turn, be released to address other state needs, including education.

Broward County, Florida, took advantage of its settlement with the tobacco industry to free up funds for school construction.

Georgia:
Choosing Sales Taxes for Schools

In 1996, Georgia voters approved a ballot initiative that gives school districts the authority to collect an additional one-cent state sales tax to help fund school construction. The program – known as the Educational Local Option Sales Tax – passed with the overwhelming support of 90 percent of Georgia voters. Each school system must then ask voters whether to put the tax in place. So far, 144 of Georgia' 180 school districts have put the measure to a vote, and 129 of them have been successful.[36]

Georgia is seventh among the state with the fastest growing elementary and secondary school enrollments, and includes three of the nation's 25 fastest-growing school districts.[37] This enrollment explosion may leave the state with a school construction bill of up to $4 billion, according to some estimates. Backers of the sales-tax program cite several advantages over a school-funding system that relies solely on property taxes, as most states do. For one, the sales tax is spread out over more people than the property tax. In addition, sales tax revenues are collected monthly, while districts must wait at least until the end of the year before they see their share of the property tax bill. This monthly collection can create a "pay-as-you-go" system for paying for some school construction needs, limiting the costly and time-consuming process of issuing bonds. That means fewer interest payment or expensive fees to bond underwriters, lawyers, and financiers. Still, critics say, sales tax revenues are more volatile than property tax receipts, which makes sales taxes a more uncertain way of funding the state's schools.[38]

In 1996, Georgia voters approved a ballot initiative that gives school districts the authority to collect an additional one-cent state sales tax to help fund school construction. Since then, citizens in 70 percent of the state's school districts have voted to use the tax to help fund their school construction programs.

Charlotte-Mecklenburg, North Carolina
Building Support for Bonds

Like many school districts, officials in Charlotte, North Carolina, were concerned about winning public support for a major school construction bond. The district grew by 28 percent between 1987 and 1997, resulting in an additional 21,000 students entering the school system.[39] But despite the undeniable need for more school capital funds, the first attempt at passing a $304 million bond issue in 1995 was rejected by voters. School officials regrouped, scaled back the size of the proposal to $217 million, and began a series of community meetings designed to cultivate support. Each school received a list of projects planned for the school – provided that the bond issue passed. The commitment to specific projects helped build a sense of trust within the community that was enough to pass the scaled-back bond issue later that year. Since then, Charlotte-Mecklenburg has been successful in passing two additional bonds in 1996 and 1997 totaling $118 million. This new funding will help the district renovate and repair 69 schools and construct 10 new school buildings.[40]

Many local school districts are working hard to find new and better ways to fund school construction and repair, but the size and scope of the problem often is too much for even the largest and most financially sound school systems. In smaller or less wealthy districts, the problems are often even more severe.

Despite these challenges, spending on school capital improvements has reached record heights. But state and local solutions have so far been unmatched by ballooning school enrollments, changing ideas about what types of buildings are best for learning, and long-overdue repairs that are making many school buildings unsafe and unusable. The final section of this report will look at what the federal government can do to help rebuild America's schools.

End Notes

1. The Senators who requested the report were Carol Moseley-Braun (D-IL), Paul Simon (D-IL), Edward Kennedy (D-MA), Paul Wellstone (D-MN), and Claiborne Pell (D-X).

2. United States General Accounting Office, *School Facilities: Condition of America's Schools*, February 1995, p2.

3. The two most frequently cited studies prior to the GAO report were: Education Writers Association, *Wolves at the Schoolhouse Door: An Investigation of the Condition of Public School Buildings*, 1989; and American Association of School Administrators, *Schoolhouse in the Red: A Guidebook for Cutting Our Losses*, 1992).

4. *Ibid.*, p16.

5. *Ibid.*, p18.

6. Those reports are: *School Facilities: Condition of America's Schools* (GAO/HEHS-95-61, Feb. 1, 1995); *School Facilities: America's Schools Not Designed or Equipped for the 21st Century* (GAO/HEHS-95-95, April 4, 1995); *Technology: America's Schools Not Designed or Equipped for the 21st Century* (GAO/T-HEHS-95-127, April 4, 1995); *School Facilities: States' Financial and Technical Support Varies* (GAO/HEHS-96-27, Nov. 28, 1995); *School Facilities: Accessibility for the Disabled Still an Issue* (GAO/HEHS-96-73, Dec. 29, 1995); *School Facilities: America's Schools Report Differing Conditions* (GAO/HEHS-96-103, June 12, 1996); and *School Facilities: Profiles of School Condition by State* (GAO/HEHS-96-148, June 24, 1996).

7. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, August 19, 1999.

8. *Ibid.*, Table 6.

9. Joe Agron, "Healthy Progress: 25th Annual Official Education Construction Report," *American School & University*, May 1999, pp. 48.

10. *Ibid.*, pp. 40-41.

11. *Ibid.*, pp. 42-43.

12. Citizens Budget Commission, *The State of Municipal Services in the 1990s: Crowding Building Conditions, and Staffing in New York City Public Schools*, September 2, 1997, p7.

13. *Ibid.*

14. *Ibid.*, p14.

15. *Ibid.*, p16.

16. Citizens Budget Commission, *School Buildings for the Next Century*, September 1996, p5.

17. Citizens Commission on Planning for Enrollment Growth, *Bursting at the Seams*, January 30, 1995, ppS2-S5.

18. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Table 5.

19. Kerry White, "Florida's School-Crowding Woes Offer Fodder for Ongoing Debate," *Education Week*, September 1997.

20. Drew Lindsay, "$1 billion School-Building Program Cannot Keep Up With Dade Students," *Education Week*, November 16, 1994.

21. Kerry White, "Florida's School-Crowding Woes Offer Fodder for Ongoing Debate," *Education Week*, September 24, 1997.

22. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Table 5.

23. Information on the LAUSD comes from its Web site at http://www.lausd.ca.us.

24. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Table 5.

25. William Fulton and Paul Shigley, "Operation Desert Sprawl," *Governing*, August 1999, p16.

26. Clark County School District, "Facts and Figures," at http://www.ccsd.net.

27. Benjamin Grove, "School Construction on Schedule at Nine of Ten New Schools," *Las Vegas Sun*, December 29, 1998.

28. Lisa Arthur, "The Lesson From Las Vegas," *Miami Herald*, February 2, 1997.

29. William Fulton and Paul Shigley, "Operation Desert Sprawl," *Governing*, August 1999, p18.

30. Bess Keller, "Building Plan in Detroit Still Only a Dream," *Education Week*, June 11, 1997.

31. David Adamany, *Detroit Public Schools Preliminary School Improvement Plan*, July 14, 1999, pp30-31.

32. *Ibid.*, p37.

33. *Ibid.*

34.Lawrence Hardy, "Covering Construction Costs," *American School Board Journal*, October 1997, p22.

35. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Table 5.

36. Linda Jacobson, "Georgia Schools Tap New Source for Construction," *Education Week*, June 3, 1998, pp13-14.

37. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Tables 5 and 6.

38. Linda Jacobson, "Georgia Schools Tap New Source for Construction," *Education Week*, June 3, 1998, pp13-14.

39. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Table 5.

40. Dana Spoor, "Forming Bonds," *American School & University*, October 1998, p50.

Conclusion:

A National Solution

States and municipalities are spending more than ever before to fix older schools and build new ones. But a significant gap still exists between the financial resources available to local governments for capital improvements and the scope of the problem. The problem is even more severe in municipalities with a weak tax base or other limitations that make it difficult for them to borrow money. Bond issues – the most common method of raising money for school construction – have been perceived as too expensive (and therefore politically unpopular) in some parts of the country. But while local school districts scramble for construction funds, buildings continue to crumble and overcrowding gets worse.

> A well-educated workforce is a national resource, especially as the U.S. economy enters the information age. But it is becoming increasingly clear that the size of the problem exceeds the ability of any one state to combat it alone.

Until recently, the federal government has played virtually no role in funding school construction and repair. The entire burden of paying for these improvements has fallen on local school districts and state agencies. While no one is proposing that local governments give up their control over school systems, there is a growing awareness that the federal government needs to do its share to help meet the nation's school construction needs. A well-educated workforce is a national resource, especially as the U.S. economy enters the information age. Historically, the federal government has intervened when an issue effects the well-being of the entire country. School construction should not be an exception. Research has shown that crumbling school buildings and ballooning student populations affect virtually every state. It is becoming increasingly clear that the size of the problem exceeds the ability of any one state or town to combat it alone.

There is growing interest in Washington, D.C., that a national solution is needed to address the problems with America's school buildings. Well over a dozen bills have been introduced during 1999 alone, and over 270 separate members of Congress have cosponsored at least one of these pieces of legislation. Support for the issue is coming from both sides of the aisle, as well, though Democrats and Republicans have not yet reached a consensus on how best to proceed. That number is likely to grow as the issue receives still more attention. (For a complete list of the legislation that has been introduced on the issue, and which members of Congress have cosponsored the legislation, please see Appendix Seven.)

> While no one is proposing that local governments give up their control over school systems, there is a growing awareness that the federal government needs to do its share to help meet the nation's school construction needs if we are to guarantee a well-educated workforce for the future.

But despite the legislative positioning taking place on Capitol Hill, little in the way of real action has taken place. This concluding section of the report takes a look at what President Clinton and the U.S. Congress have accomplished, examines what has been proposed, and advances NCBG's own strategy for putting together fair, effective legislation to rebuild America's schools.

First Steps

Congress' first venture into funding school construction came in **1994** with the passage of the School Facilities Infrastructure Improvement Act. Title XII of that law allowed the federal government to make **direct grants** to fund school construction and repairs. But while the law was on the books, ***Congress never moved to appropriate money to the program***, so it laid dormant. Efforts were made by several members of Congress to fund the initiative, but they were not successful. The program was only authorized for five years, and ***it will expire at the end of 1999 unless Congress moves to resurrect it.***

> Although more than a dozen bills have been introduced, little in the way of real action has been taken on school construction in Congress.

The story of the School Facilities Infrastructure Improvement Act represents a tremendous missed opportunity in the struggle to adequately fund our nation's school construction and repair needs. For the five years the law was on the books, there were dozens of discussions and proposals about funding school construction and repair, yet Congress did not take any action. Still, this piece of legislation may serve as a model for at least one portion of a comprehensive federal plan to help states and municipalities fix their school buildings and alleviate overcrowding.

Second Effort

The federal government's first successful effort to fund school construction and repair came in 1997, when it passed legislation sponsored by Rep. Charles Rangel (D-NY) that **allowed some schools to issue reduced-cost bonds** to raise money for school repairs, equipment purchases, development of course materials, and teacher training. These "Rangel Bonds" – officially known as Qualified Zone Academy Bonds (QZAB) – provide investors with a federal tax credit instead of the usual interest payments. By giving investors a tax break, the federal government in effect frees the school district from the cost of interest payments – in other words, **an interest-free loan to repair schools.** The Rangel bonds also require the school districts to secure **contributions from private businesses** equal to 10 percent of the total project cost.

> In 1994, Congress passed a law — the School Facilities Infrastructure Improvement Act — that authorized the federal government to provide direct grants for school construction and modernization. Congress, however, never appropriated any money for the program, and will expire at the end of 1999 without ever having spent a dime to improve America's school buildings.

Next Steps

In his January 20, 1999, State of the Union Address, President Clinton reaffirmed his commitment to increasing federal funding for school construction and maintenance and urged Congress to take up a full package of educational initiatives, including ending social promotions, renewing the focus on improving the worst-performing schools, higher standards for teacher performance, the empowerment of parents and communities, stronger disciplinary policies, and most importantly, capital investment in our schools:

> Now let's do one more thing for our children. Today, too many schools are so old they're falling apart, or so overcrowded that students are trying to learn in trailers. Last fall, Congress missed the opportunity to change that. This year, with 53 million children in our schools, Congress must not miss this opportunity again. I ask you to help our communities build or modernize 5,000 schools.[1]

In its first year before Congress – 1998 – Clinton's full package of educational initiatives did not fare well. The original school construction proposal was pushed by former Sen. Carol Moseley-Braun (D-IL) and was modeled after the Rangel bonds approved the year before. The construction proposal received considerable attention among local school administrators – including a warm embrace from top officials of the Chicago Public Schools – but only a lukewarm reception among lawmakers. Only one portion of Clinton's education package – a $1.2 billion initiative to hire an additional 30,000 elementary school teachers – made it into law.

For the 106th Congress, Clinton revived and expanded the construction proposal. Like the Rangel bonds, **the Administration's proposal will provide federal tax credits for investors in lieu of the interest payments they would typically receive.** President Clinton's Fiscal Year 2000 budget proposal includes tax credits sufficient to cover the interest on up to $25 billion worth of local bonds – enough, the administration contends, to build or modernize 6,000 schools.

It is important to make clear that the federal government is not dedicating $25 billion to school construction and repair. The U.S. Treasury Dept. estimates that **the cost to taxpayers will be about $3.7 billion over five years.** The Joint Committee on Taxation's estimate is $3.1 billion. In other words, the federal government is really only providing another $3.7 billion or so for school repairs and construction.

The Clinton Administration Proposal Would:

- Pay the interest on $11 billion of school construction and modernization bonds for both 2000 and 2001 — a total of $22 billion worth of bonds.
- Pay the interest on $2.4 billion worth of "Rangel Bonds" — also known as "Qualified Zone Academy Bonds" — over two years for schools that meet special qualifications (such as being located in a federal Empowerment Zone).

Rep. Rangel, the ranking Democrat on the House Ways & Means Committee, is the current House sponsor for the school construction legislation (H.R.1660), which was introduced on May 4, 1999. The proposal has two components:

School Modernization Bonds: The budget contains tax credits that would enable $22 billion in school modernization bonds over two years ($11 billion each in 2000 and 2001). These funds would be allocated in two separate ways. Half of the credits – representing $11 billion in bonding capacity – will be available directly to the 100 school districts that serve the largest number of low-income children. The other half will be distributed to states, which can then decide how the bonds should be distributed among school districts. In order to qualify for these funds, the state must submit to the Secretary of Education a recent study of statewide school repair and construction needs, a description of how the funds will be spent, and an assurance that school districts with the greatest need will receive highest priority.

Expanded Rangel Bonds: As discussed above, the Clinton proposal would expand the use of Qualified Zone Academy Bonds for Fiscal Years 2000 and 2001, resulting in an additional $2.4 billion in bonding capacity for eligible schools.

In addition, the Administration is proposing **a $10 million initiative intended to "design schools as centers of community."** School districts would be able to submit proposals on a competitive basis for grants to develop partnerships between school boards and the community, draft a "school system master plan," and develop site plans for individual school facilities.

The Administration's education initiatives did receive some legislative attention during 1999.[2] The Senate Finance Committee held a hearing on the matter on March 3, 1999, followed by the House Ways and Means Committee on June 23 and the Senate Health, Education, Labor and Pensions Committee on June 30.

Some lawmakers – including Rangel and Rep. Nancy Johnson (R-CT) – attempted to fold portions of the Administration's education initiative into the tax cut legislation sent to the President on August 5, 1999, but those efforts were not successful. Instead, what was ultimately included was a complex Republican proposal that would relax some of the restrictions placed on tax-exempt school construction bonds, thereby making them cheaper and easier for local governments to issue. The proposal has been pushed by Rep. Bill Archer (R-TX), chair of the House Ways and Means Committee. The proposal surfaced as part of the Republican tax cut bill (H.R.2488) which was approved by Congress in August 1999, though the tax legislation was vetoed by President Clinton.

The Clinton Administration's school construction package did not move far through Congress during 1999, though the issue did receive some attention as part of the tax cut debate. A Republican-backed proposal that would relax some restrictions on school districts that issue construction bonds did pass Congress as part of the tax cut bill, but President Clinton vetoed that legislation.

The U.S. Dept. of Education defends the interest-subsidy approach as the only way to take a bite out of such a massive problem:

> Given the scope of the nation's school facilities infrastructure problem -- $112 billion needed for facility repairs and replacement alone – a limited grant program to cover the full cost of school construction programs could not begin to make an impact on the problem. By using Federal dollars in the form of tax credits to leverage increased state and local support, we can help states and local districts to do much more construction than they would be able to do on their own.[3]

> A recent survey found that 75 percent of Americans say they would be willing to have their taxes raised by at least $200 a year to pay for specific improvements to their local public schools.

Paying for the interest costs on a school construction bond does represent a significant piece of the project cost. Idella Harter, president of the Maine Education Association, testified to a Senate committee that "the interest on a typical 30-year tax-exempt bond almost equals the amount borrowed. Even on less typical 15-year bonds, the interest totals about 65 percent of the amount borrowed."[4]

The time appears to be right for many school districts to enter the bond market. A strong economy means that the tax base is growing in many parts of the country, making it easier to raise the money necessary to pay for the bonds. Furthermore, there is mounting evidence that many taxpayers are willing to pay a little more if it means improvements to their schools. A recent survey by National Public Radio, Harvard University's Kennedy School of Government, and the Kaiser Family Foundation reported that "three out of four Americans say they would be willing to have their taxes raised by at least $200 a year to pay for specific measures to improve their community public schools."[5]

The Clinton Administration's proposal is a welcome step in the right direction, though its structure might make it difficult for some school districts to take advantage of the availability of funds. For school districts with the tax base, fiscal health, political support, and financial sophistication to negotiate the complexities of a bond issue, the interest subsidies represent a real benefit. But for school districts that do not have the capacity to go through with a large-scale bond issue, the interest-subsidy plan does no good.

> Paying the interest on school bonds — as President Clinton has proposed — reduces the actual cost of building new schools by about half. But for disadvantaged school districts that aren't in the financial position to issue a bond in the first place, the Clinton approach does little or nothing to help.

A Three Part Proposal To Rebuild America's Schools

The Neighborhood Capital Budget Group is offering three modest proposals to address the crisis of America's overcrowded and crumbling schools:

1. Reduce the burden on school districts that are in the financial position to issue bonds.

The legislation advanced by Rep. Rangel appears that it will provide real benefits for those school districts that are able to finance a bond issue.

Interest costs are a real burden on school districts — often about half the total cost of a major construction project — and eliminating that portion of the construction cost could significantly increase the amount of school construction and repair that many public school districts are able to afford. An interest-subsidy proposal similar to the one proposed by the Clinton Administration would be a solid core around which to base a national campaign to rebuild crumbling schools and relieve overcrowding.

2. Help fiscally marginal or "borderline" school districts get access to capital markets and borrow the money they need.

Some school districts have neither the credit history, tax base, financial sophistication, or political support to navigate the often complex and difficult process of issuing a school construction bond. Still, these school districts have school construction and repair needs. In fact, these financially troubled districts may have even greater capital needs than those that are more fiscally sound. These school districts need new, innovative ways to borrow money – ways that don't require them to go through the risky, competitive process of selling bonds.

Several proposals for government-sponsored loan funds or state "infrastructure banks" have been advanced at the federal level that could address the needs of this middle tier of school districts. One bill (H.R.1648), introduced by Rep Ellen O. Tauscher (D-CA), would give federal grants to state infrastructure banks that then could be loaned out to local school districts. For each loan given out by the bank, the state would have to match 25 percent of the federal contribution. School districts that might not be able to borrow money on the private markets would have the opportunity to get loans from their state's infrastructure bank. Another piece of legislation (H.R.2469) proposed by Rep. Robert Andrews (D-NJ) would establish revolving loan funds for school infrastructure needs that would work in a similar way. (See Appendix Seven for a more complete explanation of these bills.)

Effective and fair federal legislation should . . .

- Help financially stable school districts reduce construction costs by paying the interest on its capital improvement bonds.
- Provide states with the ability to create "infrastructure banks" so that school districts unable to issue bonds can borrow money for school construction.
- Give direct construction grants to those school districts that are unable to raise the necessary money any other way because of their financial condition.

3. Provide for those school districts in the worst financial shape through direct construction grants.

Some school districts are in such poor financial shape that any sort of loan program would be beyond their reach. Fairness demands, however, that the children who live in these school districts should not suffer because of the financial state of the educational system. These districts need direct grants to pay for their construction projects from either state or federal sources. The federal government should act as a safety net for these school districts to guarantee that their school capital needs are met. Reauthorizing the 1994 School Facilities Infrastructure Improvement Act — which Congress never funded during its five years on the books — and appropriating adequate money to fund these grant programs would ensure that all school districts – regardless of their financial means – have the ability to improve their schoolhouses.

End Notes

1. 1999 State of the Union Address, January 19, 1999, reprinted in *The Washington Post*, January 20, 1999, pA12.

2. Joetta Sack, "GOP Weighs In With Proposals on Construction," *Education Week*, April 14, 1999.

3. U.S. Dept. of Education, "The Administration's $25 Billion School Modernization Proposal: Questions and Answers," at http://www.ed.gov, August 26, 1999. The majority of the detail on the Clinton Administration's proposal came from the Dept. of Education web site.

4. Idella Harter, testimony on behalf of the National Education Association before the Senate Committee on Health, Education, Labor, and Pensions, June 30, 1999.

5. National Public Radio, Harvard University's Kennedy School of Government, and the Kaiser Family Foundation, "Americans Willing To Pay for Improving Schools," available at http://www.npr.org/programs/specials/poll/education.front.html

Recommendations For Action

As this report has shown, building quality school buildings and finding the money to pay for them challenges all levels of government – state, local, and federal. Each has a separate and distinct role to play in the process, whether that role is planning, designing, financing, or constructing the next generation of America's schools. Because the Neighborhood Capital Budget Group's primary constituency is in Chicago, the following local recommendations apply specifically to the situation in our own city. Those who read this report in other cities should take these suggestions as a starting point and apply them to their own unique circumstances.

Local

The Chicago Public Schools should . . .

- **Explain to the public** why so many schools saw their funding and/or allocations for major capital projects disappear in the 2000-2004 CIP.
- Disclose to individual schools and the general public the **physical assessments** of each school facility.
- Release **a clear estimate of what Chicago's school construction and repair needs are**, how much they will cost, when they plan to complete them, and how CPS plans to raise the money.
- Use **more flexible school designs** that take into account the neighborhoods in which they are located, the size and shape of the parcel of land on which they are located, the types of programs offered in the school, and the strong desire among many parents to have smaller schools.

The Mayor and the City Council should . . .

- Look for ways to use school facilities in conjunction with other city programs in order to **make schools centers of community** and creatively finance some of the potentially shared capital needs of traditional schools, job training centers, adult education, and other neighborhood activities.
- **Better coordinate the schools' capital program with the City's CIP** to maximize the potential economic benefits of capital investment.
- Use **tax increment financing** to finance school improvements when appropriate.
- **Encourage private developers to be partners** in providing the next generation of school facilities, and explore the use of **"impact fees"** to help pay for new schools.

State

The State of Illinois should . . .

- Disclose which schools are receiving dollars from Illinois FIRST, Gov. George Ryan's infrastructure program that was approved in the Spring of 1999. The Chicago Public Schools expect to receive $200 million over the next five years for school construction, and $25 million more for renovation. But it remains unclear where these dollars will be spent.
- Continue and expand State funding for school construction and repair even after the five-year term of Illinois FIRST is complete. A state "infrastructure bank" that gives grants and loans to local school districts may be one part of the solution. School construction is not a short-term issue, and ongoing state support is necessary if all Illinois school districts are going to have the school facilities they need for the 21st Century.

Federal

The President and U.S. Dept. of Education should . . .

- Revisit its current approach — which seeks to reduce school districts' cost of borrowing money by giving purchasers of school bonds federal tax credits in lieu of interest — to **ensure that this policy would provide real benefits to a broad range of school districts**. Other tax incentives — such as investment tax credits — have been suggested as possible alternatives to the Clinton Administration's current approach.
- Draft a program (or combination of programs) aimed at **school districts that are financially unable to complete a successful bond issue**. Some financially marginal school districts might benefit from low-interest lending programs or federal assistance for state infrastructure banks. For school districts in the worst financial condition, direct school construction grants may be the only option. Still, the children in those districts have the same right to a quality education than children in districts that are more financially secure.

The U.S. Congress should . . .

- Recognize the need for federal school construction assistance as a **national goal** to strengthen our economy, our families, and our communities.
- Commission the U.S. General Accounting Office to complete a **report detailing the nationwide overcrowding problem.**
- Hold a comprehensive series of **field hearings** on America's school facilities crisis.
- Most importantly, **act quickly to pass legislation** that substantially improves the ability of all U.S. school districts to meet their facilities needs — including those that are not in the financial position to complete a major bond issue.

Appendix One:

Methodology

Every effort was made in the report to be fair and precise. NCBG has attempted to make conservative estimates of the size and scope of Chicago's school construction needs, and in making the inevitable "judgment calls" inherent to any research project, we have given the Chicago Public Schools the benefit of the doubt whenever reasonable.

What constitutes an overcrowded school?

This report uses the definition of overcrowding used by the Chicago Public Schools. A school is deemed overcrowded if it is operating at 80 percent or more of its design capacity. The percent capacity is determined as follows:

percent capacity = enrollment/design capacity

Where did design capacity data come from?

Design capacity figures, by school, came from the Chicago Public Schools web site during the fall of 1998. Those figures have since been removed from the web site. Where necessary, NCBG staff called school principals directly to request design capacity data.

Design capacity for new additions, annexes, and new schools came from direct requests of the CPS central office, as well as from phone calls to school principals.

In order to calculate changes in the number of overcrowded schools over time, it was necessary to adjust the design capacity of each school for each year in which there was an addition or annex. In order to calculate this figure, we subtracted the size of the addition from the most recent design capacity figure. For example, School 1 has a 1998 design capacity of 1,000. To figure out its design capacity before its 200-student addition in 1996, we subtract the size of the addition (200) from the most recent design capacity (1,000), and find that its previous design capacity was 800 students. Similarly, for additions built after the design capacity figures we obtained, we simply added the size of the addition to the old design capacity.

Modular units were not included in design capacity figures. These units are not permanent capacity, and in many cases are substandard classroom space in need of replacement. Including the capacity of temporary units in the design capacity figure for a school would artificially deflate the need for new, permanent, classroom space.

In some instances, design capacity was reported to NCBG in terms of the number of classrooms in an addition or annex rather than a single figure for how many students the building can accommodate. In these cases, NCBG assumed that each classroom can hold 32 students – the maximum number of students allowed by the contract between CPS and the Chicago Teachers Union. Because in reality, having every classroom at capacity would be difficult for both students and teachers, this method inflates the design capacity of the school, making it appear less crowded than it actually is. Still, we elected to use it because it yields the most conservative estimates of the level of overcrowding.

Chicago Enrollment History and Projections

Chicago enrollment data by school prior to the 1998-99 school year was obtained from the CPS web site in the fall of 1998. The data has since been removed from the site.

Overall enrollment (elementary and high school) prior to the 1998-99 school year used to trace trends in public school enrollment in Chicago came from the Office of School Financial Services, *Comprehensive Annual Financial Report for the year ended June 30, 1998*, pp. 136-137. Enrollment data for the 1998-99 school year is taken from the CPS Office of Accountability, Dept. of Compliance, *Student Racial/Ethnic Survey Reported As of September 30, 1998*, p. ix.

Enrollment projections for the 1999-2000 through 2003-2004 school years were provided to NCBG by the Office of Capital Planning. However, in estimating student enrollments through the 2003-04 school year, CPS did not break down precisely in which schools, elementary or secondary, the projected number of special students would fall, but rather they provided a total estimate of special students in the CPS district. In order to get an accurate estimate of the total number of students that will be enrolled in schools in these years, NCBG added an estimate of special students to CPS' high school estimates which excluded these figures. To derive this estimate, we worked backward and calculated the percentage of total special students over time that were enrolled in high schools. (For example, from 1990-91 and 1997-98, this percentage is 21.6%, in high schools). We then multiplied this percentage by the total number of special students CPS estimated for 1999-00 through 2003-04. This calculation allowed us to provide a more accurate estimate of high school enrollment projections than that which CPS provided.

National Enrollment Data and Projections

National enrollment data, including projections through 2009, come from the U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, August 19, 1999, available at http://www.ed.gov. School districts' rate of growth is ranked by the number of new students the system must accommodate, not the percent change in student enrollments. This method of ranking makes more sense from a capital planning perspective because it is the raw number of new classrooms that must be built that determines the capital need of a school district. If a 1,000-student district grows by 100 percent, it still represents a smaller need in absolute dollar terms than a 1,000,000 student district growing by 10 percent. That being said, *many smaller and rural school districts have just as severe capital construction problems as big cities, in large part because many of them are in a more difficult position when it comes to raising construction funds.*

National Construction Estimates

Estimates of how much school construction and repair has actually been completed come from annual surveys conducted by *American School & University* magazine. *AS&U* has been conducting this survey for 25 years.

In order to update the U.S. General Accounting Office's 1995 estimate that U.S. school districts needed to make $112 billion worth of repairs, we used figures for "modernization" supplied by the AS&U surveys. NCBG subtracted the construction estimates for 1995, 1996, 1997, and 1998 (the four completed years since the GAO study was released) to reach an updated estimate of the remaining repair needs.

High School Construction Cost Estimates

To eliminate current overcrowding in Chicago's public high schools through new school construction, new school space would need to be provided for 11,763 students. In order to approximate the total cost of this project, we first need to calculate the average cost per student.

School Planning and Management (SP&M) calculates the costs of new school construction by examining what districts throughout the country are currently spending on new construction. As different districts spend different amounts on construction, they provide median, low 25%, high 25%, and high 10% cost estimates.

For high schools, they show:

Square Feet Per Student:		**Cost Per Square Foot:**	
Median:	106.67	Median	$178.3
Low 25%	138.6	Low 25%	$90.46
High 25%	258.8	High 25%	$133.33
High 10%	336.7	High 10%	$157.17

In cities, construction costs are generally higher than in rural or suburban areas. Given *SP&M's* cost figures, we can develop a range in which the cost of high school construction in Chicago will most likely lie. First, we assume the high 25% range in terms of cost/square foot. As city schools tend to have fewer square feet per student, we assume that Chicago lies in the low 25% range of this category. The construction cost per student is equal to the cost per square foot times the square feet per student, or:

$133.33*138.6 = $18,580

The total approximate cost of new high school construction in Chicago equals the cost per student times the number of students for whom construction is necessary, or:

$18,580*11,763 = $218,556,540

If we assume that high school construction per square foot is in the high 10% range, and that the square feet per student is higher at 178.3, the cost per student and total cost of construction become:

$157.17*178.3 = $28,023

$28,023*11,763 = $329,634,549

Thus, the estimated cost of eliminating current overcrowding in CPS is between $218,556,540 and $329,634,549. This projection reflects construction of schools that are approximately the same size as those currently in use.

Elementary School Cost Estimates

To eliminate current overcrowding in Chicago's public elementary schools through new school construction, new school space would need to be provided for 90,199 students. The same methodology is used with elementary schools as with high schools. SP&M estimates:

Square Feet Per Student:	
Median	120.0
Low 25%	100.0
High 25%	160.0
High 10%	227.9

Cost Per Square Foot:	
Median:	$100.00
Low 25%:	$81.97
High 25%	$125.00
High 10%	$153.85

Using the same method as before, we first assume the high 25% range in terms of cost/square foot and the low 25% range of square feet per student for CPS. The construction cost per student is equal to the cost per square foot times the square feet per student, or:

$125.00*100.0 = $12,500 for the low estimate
and **$153.85*120.0 = $18,462** for the high estimate.

Therefore, the projected total cost of alleviating current elementary school overcrowding in Chicago through new school construction would cost between:

$12,500*90,199 = $1,127,487,500
and **$18,462*90,199 = $1,665,253,938**

This projection reflects building schools that are approximately the same size as those currently in use.

Analysis of the Chicago Public Schools Capital Improvement Program:

In order to understand the Chicago Public Schools' capital expenditures and planned allocations, NCBG compared the two comprehensive Capital Improvement Program books that have been released:

1999-2003 *Capital Improvement Program*
2000-2004 *Capital Improvement Program*

Estimates of completed projects include all projects marked as completed in the 2000-2004 CIP, and include projects up through and including the 1998-99 school year. The categories used to break out expenditures by area are generally those used by CPS, though we combined certain closely related categories for the sake of clarity and space (for example, "major capital renovations" and "work in progress," the original designation for basic repairs in early CIPs; "new campus parks" and "new playlots," and "gymnasium upgrades" and "swimming pool upgrades").

NCBG also looked at the changes between the 1999-2003 and 2000-2004 CIPs. These changes fit into four categories:

Funded Projects That Have Been Eliminated: These projects had an identified funding source in the 1999-2003 CIP, but did not appear in the 2000-2004 CIP. Because the CIP is a cumulative document, completed projects appear in CIPs even after the project is finished. The public can only assume that projects that do not reappear in future CIPs (and have never been marked as completed in earlier documents) have been eliminated.

Unfunded Projects That Have Been Eliminated: These projects never had an identified funding source, and did not reappear in the 2000-2004 CIP.

Changes in the Cost of Completed Projects: For many completed projects, the cost of the project changed between the 1999-2003 CIP and the 2000-2004 CIP. These cost changes are either changes in the scope of the project, or represent the project coming in over or under budget.

Changes in the Estimates Cost of Future Projects: These projects were the most difficult to interpret. Many future projects saw their dollar allocation decline – or disappear entirely – between the 1999-2003 CIP and the 2000-2004 CIP. These projects are distinct from cancelled projects because they still appear on the books, but they no longer have a cost estimate. Some of these projects previously had an identified funding source; others never were listed as funded. From the standpoint of the public, this change in allocation may justifiably be perceived as a change in status. A cost estimate is a concrete figure to which a parent, teacher, community leader, or school activist can hold CPS accountable. Furthermore, estimating cost even well before a project is scheduled to be build is an important stage in the capital budgeting process. Because many of these projects were never funded, and they were not eliminated from the books, NCBG took a very conservative approach and did not count these projects as "cuts" in the capital budget. But the very large change in project budgets between the two CIP documents certainly does appear to be a substantial and disturbing shift in the level of commitment that CPS is willing to make to certain key projects – particularly in the area of new construction.

Changes to High School Capital Improvement Program between 1999-2003 and 2000-2004 CIP

	$ Increases	$ Decreases	Total Change
Funded Projects That Have Been Eliminated	$0	($55,468,144)	($55,468,144)
Unfunded Projects That Have Been Eliminated	$0	($64,287,490)	($64,287,490)
Funding Changes to Completed Projects (Cost Adjustments)	$7,618,134	($4,891,092)	$2,727,042
Funding Changes to Future Projects	$28,974,382	($237,521,465)	($208,547,083)
New Projects in 2000-2004 CIP	$61,730,000	$0	$61,730,000
Totals	**$98,322,516**	**($362,168,191)**	**($263,845,675)**

Changes to the Elementary School Capital Improvement Program between 1999-2003 and 2000-2004 CIP

	$ Increases	$ Decreases	Total Change
Funded Projects That Have Been Eliminated	$0	($128,331,147)	($128,331,147)
Unfunded Projects That Have Been Eliminated	$0	($153,295,000)	($153,295,000)
Funding Changes to Completed Projects (Cost Adjustments)	$9,700,135	($15,351,473)	($5,651,338)
Funding Changes to Future Projects	$62,355,284	($913,028,509)	($850,673,225)
New Projects in 2000-2004 CIP	$71,579,084	$0)	($71,579,084)
Totals	**$143,634,503**	**($1,210,006,129)**	**($1,066,371,626)**

Dropouts

To assess the causes of enrollment changes in Chicago's public high schools, NCBG examined enrollment trends from the 1991-92 school year through the 1997-98 school year. The reason behind the selection of these years is simply that reliable data related to dropouts and enrollment by grade levels were only available for these years.

NCBG examined year to year changes in total high school enrollment in Chicago Public Schools. The overall changes in enrollment were then broken down into the main factors influencing aggregate enrollment changes. NCBG assumed that the total change in CPS high school enrollment for a given year is the result of (1) the change in the number of dropouts over the previous year; (2) the change in the size of the overall incoming freshman class over the previous year, and; (3) the change in enrollment due to changes in "student mobility". The first two categories are known, documented numbers, while the last was constructed by NCBG. The calculation we used to derive the change in student mobility is straightforward: it is the difference between the change in total high school enrollment in a given year and the change in enrollment due to the first two factors- dropouts and students entering as freshmen. This construct is convenient, as "student mobility" can be viewed as all non-dropout, non-demographic factors affecting enrollment changes.

The results of our calculations were interesting to say the least. NCBG examined the results in two different ways. We first examined the data in an aggregate form by looking at the total change in enrollment and the total effect of each of the three above factors over the entire 7-year period. We also broke the data down in a year-by-year analysis.

Using the aggregate approach, NCBG calculated that based upon the seven years of available data, the total change in the number of dropouts (3404 additional dropouts) accounted for 80% of the total change in the number of CPS high school students (which was 4258 fewer students). The remaining 20% of the enrollment change was due to the changes in the number of incoming freshmen and in student mobility. From this perspective, it appears that dropouts have played a very large role in affecting enrollment levels in Chicago's high schools.

Examining the data year-by-year, however, yields results which do not necessarily portray the dropout effect as overwhelming as it appears using the aggregate approach. Using this second approach, we looked for a year-by-year correlation between dropouts, changes in the size of the incoming freshmen class and changes in student mobility. In 4 out of the 7 years (57%), the change in dropouts was correlated with the change in enrollment for that year. In other words, in those years, an increase in the number of dropouts was associated with a decrease in enrollment (or vice versa). Looking at this from the reverse perspective, in 3 out of 7, or 43% of the years we examined, the change in dropouts was not correlated with the total change in enrollment. Examining the non-dropout factors shows that in 5 out of the 7 years (71% of the time), the combined changes in incoming freshmen classes and student nobility was correlated with changes in enrollment. In only 2 out of 7 years, or 29% of the years we examined, this was not the case.

The overall results of NCBG's analysis show that the causes of enrollment changes in Chicago's public high schools may not be as clear and straightforward as one might think. Instead, it appears that in addition to dropouts, other factors such as student nobility and the size of freshmen classes contribute to changes in yearly student enrollment figures.

Appendix Two:
All Overcrowded High Schools in Chicago

How To Read This Table: This table includes information, by year, on all the Chicago public high schools that were overcrowded at any point between the 1988-89 and 1998-99 school years. If a cell is blank, it indicates that the school was not overcrowded during that school year. The last column lists how many years the school has been overcrowded.

	Percent Capacity											
	88-89	**89-90**	**90-91**	**91-92**	**92-93**	**93-94**	**94-95**	**95-96**	**96-97**	**97-98**	**98-99**	**Years Over-crowded**
Amundsen	127%	128%	122%	110%	118%	127%	120%	125%	130%	128%	135%	11
Austin	117%	109%	97%	83%		82%						5
Bogan Tech	136%	133%	133%	140%	132%	134%	129%	115%	121%	115%	104%	11
Bowen	90%	86%										2
Calumet	90%	90%										2
Chi. Agricultural		87%	89%	88%	89%	88%	85%	92%	92%	81%	92%	10
Chicago Vocational	91%											1
Clemente	103%	99%	99%	99%	90%	88%	87%	85%	83%	82%		10
Collins	92%	93%	96%	91%		81%	82%	80%				7
Corliss	88%	85%	82%									3
Crane Tech.	81%								85%			2
Curie Metro	120%	116%	116%	110%	111%	111%	109%	113%	109%	113%	103%	11
Dunbar	130%	125%	123%	118%	113%	114%	114%	113%	115%	117%	103%	11
Englewood	125%	115%	89%					85%	86%	88%		6
Farragut	97%	88%	92%	94%	94%	86%			84%	96%	90%	9
Fenger	106%	106%	94%	92%	83%							5
Foreman	102%	100%	104%	101%	112%	126%	138%	139%	148%	134%	110%	11
Gage Park	107%	105%	96%	96%	100%	107%	109%	111%	115%	110%	113%	11
Harlan Academy	99%	90%	81%									3
Harper					80%	82%	98%	93%	97%	100%	90%	7
Hirsch	91%	89%	82%	83%								4
Hubbard		84%	86%	96%	98%	99%	99%	103%	105%	106%	104%	9

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	Percent Capacity											
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	Years Over-crowded
Hyde Park	116%	111%	104%	105%	103%	102%	98%	88%	84%	89%	80%	11
Jones Metro	84%		81%			86%	91%	90%	93%	88%		7
Juarez	120%	116%	115%	116%	128%	134%	123%	116%	111%	103%	96%	11
Julian	118%	104%	94%	91%	87%					81%		6
Kelly	133%	132%	126%	120%	132%	142%	147%	163%	170%	165%	165%	11
Kelvyn Park	103%	97%	95%	95%	102%	104%	108%	115%	119%	118%	120%	11
Kennedy	97%	96%	93%	99%	100%	108%	109%	112%	112%	114%	115%	11
Kenwood	107%	107%	101%	103%	100%	97%	97%	102%	103%	104%	97%	11
Lane Tech	91%	87%	80%	84%	84%	87%	86%	86%	87%	87%	91%	11
Lindblom	110%	87%										2
Lincoln Park						83%	87%	85%				3
Manley	83%											1
Marshall	108%	106%	99%	91%	97%	95%	96%	108%	100%	91%		10
Mather	133%	130%	127%	123%	118%	119%	127%	127%	136%	144%	135%	11
Morgan Park	103%	100%	99%	99%	98%	98%	102%	103%	105%	105%	102%	11
Near North	85%	85%					82%					3
Orr	85%	81%										2
Phillips/Ind. Skill	83%											1
Prosser	99%	95%	105%	110%	109%	104%	93%	88%		93%	100%	10
Richards	113%	108%	112%	106%	108%	111%	113%	108%	110%	102%	93%	11
Robeson	120%	109%	97%	88%	85%	84%	80%	82%	85%	83%		10
Roosevelt	124%	110%	109%	110%	118%	122%	117%	115%	118%	119%	110%	11
Schurz	116%	107%	99%	99%	106%	110%	112%	111%	107%	99%	87%	11
Senn	91%											1
Simeon	105%	97%	96%	101%	94%	91%	87%	94%	96%	93%		10
Schurz	116%	107%	99%	99%	106%	110%	112%	111%	107%	99%	87%	11
Steinmetz	89%	91%	91%	101%	104%	103%	101%	104%	100%	102%	98%	11
Sullivan	92%	96%	94%	94%	103%	99%	11%	110%	111%	102%	98%	11
Urban Youth									110%	136%	169%	3
Von Steuben	96%	100%	102%	106%	113%	112%	113%	108%	109%	111%	113%	11
Washington	108%	104%	100%	101%	105%	108%	101%	102%	104%	101%	105%	11
Wells	106%	104%	103%	105%	102%	104%	99%	102%	99%	92%		10
Young Magnet	99%	96%	98%	97%	99%	97%	95%	96%	93%	94%	98%	11
Additons	N/A	2	1	0	1	4	1	1	3	2	0	
Subtractions	N/A	7	5	4	3	2	2	1	3	1	8	

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Appendix Three:
Capacity Additions at Chicago High Schools

How to Read This Table: The following table includes all planned and completed capacity additions (new schools, additions, annexes and modular units) for all high schools in Chicago, as well as all overcrowded schools without any planned capital improvements. For completed projects, the table includes the year the project was completed and the additional students the capacity addition will accommodate. For future projects, the table includes whether the project's start date has been delayed and whether or not the project is listed as "funded" in the Chicago Public Schools 2000-2004 *Capital Improvement Program*. "Previously funded" projects are those that had funding in the 1999-2003 CIP but were listed as unfunded in the next year's document. Capacity figures are not given for modular units because they are not permanent capacity additions.

School Name	98-99 %	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed?	Funded?
Amundsen	135%							
Bogan	104%							
Chicago Ag.	92%	Addition	1996	600				
Clemente	82%							
Curie	103%							
Dunbar	103%							
Englewood	88%							
Farragut	90%							
Foreman	110%							
Gage Park	110%	Modular Unit	1998	N/A	Addition	2001-2004	Yes	No
Graham Training Center	60%	Modular Unit	1999	N/A				
Hancock	N/A				Replacement School	2001-2004	No	No
Harper	90%							
Hubbard	104%							
Hyde Park	80%							
Jones	50%				Addition	2001-2004	Yes	Partially Funded
Juarez	96%				Addition	2001-2004	Yes	Partially Funded
Kelly	165%	Modular Unit	1997	N/A	Addition	2001-2004	Yes	Partially Funded

School Name	98-99 %	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed?	Funded?
Kelvyn Park	120%				Replacement School	2001-2004	Yes	Partially Funded
Kennedy	115%							
Kenwood	97%							
Lane Tech	91%							
Mather	135%							
Morgan Park	102%							
Prosser	100%							
Richards	93%				Addition (Career Academy)	1999	No	Yes
Roosevelt	110%							
Schurz	87%							
Simeon	79%				Replacement School	2001-2004	Yes	Partially Funded
Southside College Prep	N/A				Addition	2000	No	Yes
Steinmetz	98%							
Sullivan	98%							
Urban Youth	169%				Scheduled for Closure			
Von Steuben	113%							
Washington	105%							
Westing-house	60%				Replace-ment School	2001-2004	No	Partially Funded
Young	98%							

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Appendix Four
Overcrowded Elementary Schools In Chicago

How To Read This Table: This table includes information, by year, on all the Chicago public elementary schools that were overcrowded at any point between the 1988-89 and 1998-99 school years. If a cell is blank, it indicates that the school was not overcrowded during that school year. The last column lists how many years the school has been overcrowded.

	Percent Capacity											
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	Years Overcrowded
Addams	101%	105%	100%	102%	101%	113%	110%	111%	119%		107%	10
Agassiz											81%	1
Albany Park									80%		82%	2
Armstrong	112%	112%	125%	140%	152%	133%	105%	127%	139%	149%	165%	11
Ashe										82%	81%	2
Avondale	146%	153%	146%	149%	151%	169%	135%	141%	151%	158%	167%	11
Barry	99%	102%	105%	106%	100%	99%	104%	103%	106%		83%	10
Barton	85%	84%	83%	80%								4
Bass	83%				83%	82%	80%					4
Bateman	105%	102%	103%	99%	80%	90%	90%	96%	104%	102%	81%	11
Beasley Magnet							81%	81%	80%	81%	82%	5
Belding				81%				82%	83%	84%	80%	5
Black Magnet	101%	103%	99%	100%	99%	100%	102%	105%	104%	101%	108%	11
Bontemps	88%	84%		81%								3
Boone			81%	88%	85%	97%	86%	87%	92%	85%	93%	9
Bradwell											82%	1
Brentano	93%	91%	88%	84%	81%							5
Bridge									82%	82%	89%	3
Bright	91%	95%	87%	90%	93%	93%	91%	92%	96%	97%	69%	10
Brighton Park					88%	94%	100%	100%	105%	111%	117%	7
Brown Academy	95%	83%										2
Bryn Mawr	107%	106%	104%	101%	98%		88%	82%	82%		87%	9
Budlong	81%	80%	90%	86%	88%	93%	97%	102%	108%	87%	89%	11
Bunche	101%	97%	101%	102%	90%	86%	85%	86%	81%	82%		10
Burbank	88%	92%	95%	100%	104%	118%	120%	124%	136%	113%	122%	11
Burley	83%		80%									2
Castellanos (Formerly Burns)	138%	131%	126%	125%	126%	130%	127%	122%	121%	102%	92%	11
Burr	84%	89%	97%	106%	100%	96%	93%	89%	87%	85%	80%	11
Burroughs	83%	83%	84%		85%	90%	93%	92%	99%	108%	118%	10
Byford	121%	115%	95%	97%	105%	98%	106%	108%	101%	103%	108%	11
Cameron	144%	151%	117%	117%	117%	113%	113%	108%	115%	87%	92%	11

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	Percent Capacity											
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	Years Over-crowded
Cameron	144%	151%	117%	117%	117%	113%	113%	108%	115%	87%	92%	11
Cardenas	94%	94%			106%		100%	99%	100%		87%	7
Carroll	99%	103%	120%	115%	107%	108%	115%	127%	139%		104%	10
Carson					96%	116%	119%	121%	126%	56%	93%	6
Casals								80%				1
Chase	84%		81%		85%	86%	83%	85%	88%	88%	87%	9
Chavez Center								100%	118%	107%	106%	4
Chopin	87%	83%	82%	85%	83%	87%	83%					7
Clinton									84%	93%	104%	3
Clissold	81%		86%	87%	88%	89%	88%	87%	86%	86%	90%	10
Coles	87%	88%	89%	82%	84%	84%	82%	83%	84%	95%	108%	11
Columbus	107%	112%	116%	102%	100%	92%	105%	97%	96%	94%	98%	11
Cook	84%											1
Coonley							88%					1
Cooper	161%	160%	139%	127%	137%	136%	131%	132%	131%	137%	149%	11
Corkery	105%	99%	104%	111%	112%	107%	96%	97%	97%			9
Crown	90%	80%	82%									3
Cuffe				83%	92%	96%	99%	91%	89%	91%		7
Cullen	85%	82%	82%	81%		81%						5
Curtis	80%	81%	83%		82%							4
Darwin	88%	87%	88%	89%	92%	92%	88%	83%	82%			9
Davis Academy			83%	94%	94%	91%	92%	106%	103%	114%	137%	9
Dawes									86%	102%	132%	3
De Diego	104%	106%	105%	104%	103%	102%	103%	102%	101%	104%	104%	11
De Dominguez											95%	1
De La Cruz					84%	83%				97%	92%	4
Decatur					91%	86%	81%				81%	4
DePriest	80%			80%						85%	83%	4
Dever											81%	1
Dewey	81%											1
Dixon				80%			82%	82%	83%	84%	86%	6
Doolittle West	100%	91%	92%	95%	81%							5
Dore				93%	106%	130%	133%	135%	145%			6
Eberhart					85%	88%	105%	107%	116%	124%	90%	7
Edwards	83%	87%	89%	88%	85%	96%	96%	109%	104%		81%	10
Emmet	82%	83%			81%	87%				80%		5
Everett	96%	96%	100%				82%	86%	92%	98%	104%	8
Falconer	84%	81%	85%	88%	97%	102%		88%	99%	109%	113%	10
Farren	91%	92%	89%	85%	84%		81%					6
Fernwood		82%	81%	84%	84%							4
Field	107%	109%	108%	116%	116%	123%	126%	123%	135%	141%	140%	11
Fulton	93%	90%	92%	81%	81%	81%	85%					7

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	Percent Capacity											
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	Years Over-crowded
G. Washington					96%	101%	96%	99%	96%			5
Gale	94%	96%	108%	102%	101%	104%	102%	101%	101%	103%		10
Gallistel	87%	86%	95%	100%	96%	95%	109%	115%	126%	129%	133%	11
Garvey											86%	1
Garvy											86%	1
Gary	117%	121%	95%	128%	119%	116%	115%	116%	122%		81%	10
Goethe	101%	100%	104%	101%	101%	97%	93%	88%	90%	88%	83%	11
Gompers	91%	97%	96%	99%	96%	98%	95%	84%				8
Goodlow		81%	88%	85%	87%	89%	88%	87%				7
Goudy	96%	85%	93%	98%	98%	100%	100%	109%	111%	111%	110%	11
Gray		81%				88%	98%	103%	115%	125%	87%	7
Greene	89%	90%	102%		86%	92%	105%	113%	111%	119%	91%	10
Grimes		80%	83%	86%	88%	88%	91%	95%	87%	92%	100%	10
Guggenheim	93%	91%	92%		89%	103%		87%	95%	96%	88%	9
Halley (Formerly Brenan)				81%								1
Hale										81%	85%	2
Hamline	186%	186%	150%	184%	157%	154%	228%	80%			88%	9
Hammond	153%	152%	155%	154%	143%	146%	139%	136%	92%	90%	95%	11
Hamline	186%	186%	150%	184%	157%	154%	228%	80%			88%	9
Hammond	153%	152%	155%	154%	143%	146%	139%	136%	92%	90%	95%	11
Hanson Park									91%			1
Harvard	112%	106%	100%	95%	98%	94%	94%	90%	90%	91%	90%	11
Haugan	88%	88%	92%	96%	106%	99%	84%	88%	89%	93%	97%	11
Hay	114%	116%	94%	83%								4
Hayt	115%	104%	118%	119%	119%	127%				81%	96%	8
Healy	95%	96%	100%	98%	101%	113%	85%	90%	92%	91%	91%	11
Hedges										96%	100%	2
Henderson	95%	91%	92%	91%	92%	83%	87%	85%	84%		86%	10
Hendricks			84%		85%	83%	80%		96%			5
Henry	113%	109%	110%	113%	101%	102%	110%	113%	122%		101%	10
Henson											83%	1
Hibbard	80%			87%	90%	98%	100%	98%	100%	99%		9
Higgins	83%											1
Holden						82%	86%	85%	81%	92%	88%	6
Holmes	93%	92%	89%									3
Howe	97%	102%	102%	94%	87%							5
Hurley	84%	82%	88%	92%	97%	110%	118%	126%	134%	89%	114%	11
Irving						82%	84%	84%	82%	82%		5
Jahn	89%	83%	80%	83%	82%							5
Jamieson						80%	85%	84%	82%	84%	97%	6
Johns School			81%									1
Jordan								88%	102%	94%	98%	4
Jungman	98%	83%	84%	82%	102%		83%	83%				7
Kanoon	84%	84%	84%	86%	89%	91%	94%	92%	92%	97%	102%	11

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	Percent Capacity											
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	Years Over-crowded
Hamline	186%	186%	150%	184%	157%	154%	228%	80%			88%	9
Hammond	153%	152%	155%	154%	143%	146%	139%	136%	92%	90%	95%	11
Hanson Park									91%			1
Harvard	112%	106%	100%	95%	98%	94%	94%	90%	90%	91%	90%	11
Haugan	88%	88%	92%	96%	106%	99%	84%	88%	89%	93%	97%	11
Hay	114%	116%	94%	83%								4
Hayt	115%	104%	118%	119%	119%	127%				81%	96%	8
Healy	95%	96%	100%	98%	101%	113%	85%	90%	92%	91%	91%	11
Hedges										96%	100%	2
Henderson	95%	91%	92%	91%	92%	83%	87%	85%	84%		86%	10
Hendricks			84%		85%	83%	80%		96%			5
Henry	113%	109%	110%	113%	101%	102%	110%	113%	122%		101%	10
Henson											83%	1
Hibbard	80%			87%	90%	98%	100%	98%	100%	99%		9
Higgins	83%											1
Holden						82%	86%	85%	81%	92%	88%	6
Holmes	93%	92%	89%									3
Howe	97%	102%	102%	94%	87%							5
Hurley	84%	82%	88%	92%	97%	110%	118%	126%	134%	89%	114%	11
Irving						82%	84%	84%	82%	82%		5
Jahn	89%	83%	80%	83%	82%							5
Jamieson						80%	85%	84%	82%	84%	97%	6
Johns School			81%									1
Jordan								88%	102%	94%	98%	4
Jungman	98%	83%	84%	82%	102%		83%	83%				7
Kanoon	84%	84%	84%	86%	89%	91%	94%	92%	92%	97%	102%	11
Keller Magnet			81%	81%	80%	80%		82%	82%	83%	90%	8
Kellogg	86%	88%	85%	91%	91%	92%	90%	93%	95%	93%	90%	11
Key	109%	102%	100%	95%	91%	90%	85%	84%	93%	90%	95%	11
Kilmer	93%	98%	101%	110%	122%	126%	127%	131%	129%	85%	88%	11
Langston Hughes				96%	93%	100%	97%	97%	103%	116%	119%	8
LaSalle	81%	82%	83%	81%	80%	81%	82%	82%	82%	82%	83%	11
Laura S. Ward										88%	81%	2
Lawndale	81%											1
Lee						82%	85%	87%	92%		82%	5
Leland						95%	91%	95%	91%	93%	95%	6
Lenart Center			151%	148%	145%	145%	141%	145%	147%	145%	146%	9
Lewis	99%	103%	97%	106%	117%	120%	116%	126%	127%	131%	64%	10

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	Percent Capacity											
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	Years Over-crowded
Libby	138%											1
Linne	83%	89%	91%	90%	84%		85%	88%	92%	96%	103%	10
Lloyd	96%	95%	98%	96%	109%	107%	114%	122%	98%	111%	123%	11
Locke						80%	83%	91%	99%	108%		5
Lovett	82%								84%			2
Lowell	96%	96%										2
Lozano Bilingual	138%	139%	131%	130%	120%	116%						6
Lyon						83%	95%	102%	110%	125%	84%	6
Marquette	100%	107%	100%	88%	86%	97%	103%	115%	125%	109%	138%	11
Marsh			86%	92%	89%	91%	92%	96%	100%	108%	121%	9
McAuliffe						88%	88%	94%	100%	94%	83%	6
McCormick	95%	95%	98%	97%	95%	100%	92%	89%	89%	87%	91%	11
McDowell School				88%	84%	83%				83%	91%	5
McKay	187%	204%	228%	181%	234%	187%	184%	211%	251%		95%	10
McPherson	132%	132%	130%	138%	135%	141%	136%	135%	124%	117%	104%	11
Metcalfe	90%	83%	84%		84%	83%	89%	83%	85%	85%	85%	10
Mireles (Formerly Sheridan)	94%	84%	88%	82%	81%	84%	80%					7
Mitchell	109%	104%	107%	96%	94%	87%	84%	90%	86%	90%	88%	11
Monroe									83%	97%	102%	3
Moos				84%		83%	83%	87%	87%	84%		6
Morrill	90%	94%	81%			81%	83%	82%	89%	88%	88%	9
Morse	94%	95%						80%	86%	87%	89%	6
Mozart									81%	83%	84%	3
Munoz Marin			101%	103%	110%	105%	111%	111%	101%	115%	120%	9
Nash	82%	83%	82%		82%							4
Nathan Davis								87%	97%	111%	129%	4
Nightingale	84%	97%	93%	102%	83%	99%	104%	108%	113%		82%	10
Ninos Heroes	83%	85%	88%	82%	87%	82%	81%			84%	95%	9
Nobel	89%	95%	112%	106%	103%	112%	122%	124%	125%	123%	117%	11
O'Toole	88%	85%	90%									3
Ogden	84%	84%	84%	90%	91%	89%	92%	88%	94%	94%	91%	11
Oglesby	109%	111%	110%	104%	109%	99%	96%	100%	108%	112%	105%	11
Oriole Park						82%				84%	80%	3
Orozco	97%	100%	110%	87%	90%	89%	92%	88%	84%	83%	82%	11
Otis	82%											1

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	Percent Capacity											
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	Years Over-crowded
Overton	97%	90%	86%	80%								4
Owens									81%	86%		2
Palmer	84%	89%	86%	86%	94%	100%	103%	106%	110%		88%	10
Park Manor		80%	82%	85%	84%							4
Parkside	91%	94%	89%	84%								4
Pasteur					89%	91%	97%	101%	110%	81%	100%	7
Peabody	86%	83%	89%	86%	81%	85%	82%	81%	80%			9
Peck			86%	92%	96%	104%	102%	115%	143%	103%	135%	9
Peirce	96%	96%	99%	100%	104%	114%	113%	115%	112%	111%	110%	11
Pershing	93%	93%	90%	86%	89%	88%	86%	88%	86%	90%	86%	11
Peterson	83%		82%	82%	81%	81%	81%	84%	86%	86%	94%	10
Piccolo Elemen-tary	90%	86%	86%	82%								4
Piccolo Middle	89%											1
Pickard	155%	146%	158%	102%	102%	107%	103%	105%	110%	106%	117%	11
Pilsen Acad-emy	99%	99%	101%	97%	95%	96%	96%	97%	96%	93%	93%	11
Pirie	86%	83%	83%	87%	81%					82%	83%	7
Plamondon	85%	80%	80%	80%		94%	90%	86%	85%	83%	81%	10
Portage Park							86%	87%	90%	91%	98%	5
Powell	97%	97%	99%	99%	100%	95%	96%	96%	96%	98%	87%	11
Prescott	90%	82%	84%									3
Prussing			88%	95%	99%	99%	104%	106%	99%	111%	114%	9
Pulaski	91%	82%	85%	82%	81%	87%	87%	86%	83%	84%		10
Pullman	89%	84%	81%	84%	81%		83%	81%	81%	88%	87%	10
Randolph Magnet	85%	90%	91%	95%	100%	101%	106%	103%	114%	98%		10
Ravenswood	81%						84%	84%	83%	87%		5
Reilly	91%	93%	100%	107%	116%	132%	151%	164%	182%	131%	139%	11
Reinberg				89%	104%	117%	131%	133%	132%	81%	101%	8
Riis	80%	83%										2
Ruiz				112%	104%	94%	88%	90%	87%	86%	90%	8
Sauganash		81%	80%	82%							80%	4
Sawyer					100%	108%	111%	112%	114%	124%	185%	7
Scammon	98%	97%	104%	106%	119%	126%	126%	136%	147%	92%	100%	11
Schmid										90%		1
Schneider	84%			85%	89%	90%	86%	86%	83%	91%		8
Schubert										91%	107%	2
Seward	185%	191%	199%	201%	205%	146%	128%	125%	133%	125%	138%	11
Shields						89%	94%	106%	113%	127%	139%	6
Shoesmith											85%	1
Simmye Anderson Academy				139%	115%	118%	122%	105%	108%	111%	85%	8

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	Percent Capacity											
	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	Years Overcrowded
Smith	81%		81%									2
Smyser								84%	83%	92%		3
Songhai	85%		84%	85%	83%	87%	86%	82%			94%	8
Spencer											84%	1
Spry	132%	133%	141%	125%	125%	117%	117%	115%	97%		84%	10
Stone	86%	88%	82%	83%	83%	82%	82%					7
Stowe	82%	85%	93%	88%	86%		84%	83%	84%	90%	89%	10
Sullivan	129%	123%	123%	114%	121%		100%	99%	96%	114%	117%	10
Sutherland			86%	82%	85%	88%	93%	97%	95%			7
Swift	106%	110%	116%	118%	122%	116%	96%	95%	97%	109%		10
Talcott	87%	82%	81%	81%	83%							5
Tanner											83%	1
Taylor				82%	81%	81%						3
Thorp						83%	85%	84%	84%	84%	85%	6
Tilton	83%											1
Tonti		80%	87%		102%	104%	112%	119%	126%	88%	100%	9
Trumbull	89%	89%	87%					82%	80%			5
Twain										99%	110%	2
Van Vlissingen	128%	116%	114%	113%	107%	110%	95%	91%	88%	89%	85%	11
Vanderpoel	80%	80%			81%	82%	82%	82%	82%	81%	83%	10
Volta	83%	90%	90%	93%	97%	103%	108%	102%	106%			9
Von Humboldt	86%	84%	84%	81%	82%					82%	81%	2
Washington, Harold										83%	81%	2
Waters			84%	85%	82%	84%	91%	89%	98%	96%	93%	9
Webster	96%	98%	98%	98%	93%	95%	97%	93%	86%	91%	92%	11
Wentworth	91%	91%	84%	87%	87%	81%						6
West Pullman	88%	86%	83%	81%								4
White School			100%	89%	94%	94%	91%	96%	100%	106%	109%	9
Whitney	201%	191%	193%	189%	101%	106%	117%	115%	124%	122%	108%	10
Whittier	99%	88%	94%	86%	99%	101%	103%	98%	92%	94%		10
Wildwood					81%							1
Woodlawn											94%	1
Woods Academy			83%	88%	97%	92%	87%	82%	85%	85%	81%	9
Wright		83%	82%	80%								3
Yates	83%											1
Young						81%	81%	83%	91%	96%		5
Zapata										88%	92%	2

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Appendix Five
Capacity Additions at Chicago Elementary Schools

How to Read This Table: The following table includes all planned and completed capacity additions (new schools, additions, annexes and modular units) for all elementary schools in Chicago, as well as all overcrowded schools without any planned capital improvements. For completed projects, the table includes the year the project was completed and the additional students the capacity addition will accommodate. For future projects, the table includes whether the project's start date has been delayed and whether or not the project is listed as "funded" in the Chicago Public Schools' 2000-2004 *Capital Improvement Program*. "Previously funded" projects are those that had funding in the 1999-2003 CIP but were listed as unfunded in the next year's document. Capacity figures are not given for modular units because they are not permanent capacity additions.

School Name	98-99 % Capacity	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed	Funded?
Addams	107%	Annex	1996	256				
Agassiz	81%	Modular	1997	N/A				
Albany Park	82%				Replacement School	2001-04	No	No
Anderson	85%				Replacement School	2001-04	No	No
Armstrong	165%	Modular	1997	N/A	Addition	1998	Yes	Yes
		Modular	1997	N/A				
		Modular	1997	N/A				
		Addition	1997	90				
Ashe	81%							
Audobon	74%				Addition	2001-04	No	No
Avondale	167%	Modular	96	N/A				
Barry	83%	Annex	1996	320				
Bateman	81%	Modular	96	N/A				
		Addition	1998	256				
Beasley	82%							
Beidler	41%				Addition	1999	Yes	Yes
Beaubien	77%	Annex	1996	384				
Belding	84%							
Bell	54%				Addition	2001-04	No	No
Black	108%						No	No
Black	108%				Addition	2001-04	No	No
					Modular Unit	1998	No	Yes
Boone	93%	Addition	1996	90				
Bridge	82%							
Bradwell	82%							
Bright	69%	Annex	1998	256				

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School Name	98-99 % Capacity	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed	Funded?
Brighton Park	117%				Addition	2000	No	Yes
Brown Acad.	77%	Modular Unit	1998	N/A				
Bryn Mawr	87%				Addition	2001-04	Yes	Yes
Budlong	89%	Annex	1996	256				
Burbank	122%	Modular	1996	N/A	Addition	2000	No	No
Burnham	77%				Replacement School	2001-04	No	No
Castellanos	92%	Modular	1997	N/A				
Burr	80%							
Burroughs	118%					1999	No	Yes
Byford	108%				Replacement School	1999	No	Yes
Byrd	46%				Replacement School	2001-04	Yes	Partially Funded
Byrne	73%	Modular	1997	N/A				
Cameron	92%	Annex	1997	384				
Carnegie	73%				Addition	2000	Yes	Yes
Carroll	104%	Modular Unit	1997	N/A	New Area School	2001-04	No	No
Carson	79%	Addition	1997	690				
		Modular	1997	N/A				
Chase	87%							
Chavez	106%							
Christopher	N/A				New Area School	2001-04	No	No
Clinton*	104%				New Area School	2001-04	No	No
Clissold	90%				Addition	2001-04		Previously
Coles	108%	Modular	1997	N/A	Addition	2001-04	Yes	No
Columbus	98%							
Cooper	149%							
Cuffe	91%				Replacement School	2001-04	No	No
Davis Dev. Center	N/A				Replacement School	2001-04	Yes	Previously Funded

School Name	98-99 % Capacity	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed	Funded?
Nathan Davis	111%	Modular Unit	1996	N/A				
Miles Davis Acad.	137%	Modular Unit	1997	N/A	Replacement School	2001-04	Yes	No
Charles Dawes	132%	Modular Unit	1997	N/A	Addition	2001-04	No	Previously Funded
					New Area School	1999	No	Yes
Decatur	81%				Addition	2001-04	No	No
De La Cruz	92%							
De Diego	104%							
De Priest	83%				Replacement School	2001-04	Yes	Previously Funded
Dixon	86%							
Dore	76%	Annex	1996	320				
Earhart	79%				Addition	1999	Yes	Yes
					Modular Unit	1998	Yes	Yes
Eberhart	90%	Modular	1997	N/A				
		Addition	1998	530				
Edgebrook	70%				Addition	2001-04	No	No
Edwards	81%	Annex	1996	384				
Ellington	66%				Replacement School	2001-04	No	No
Emmet	78%				Addition	2001-04	Yes	Previously
Esmond	65%				Replacement School	2001-04	Yes	No
Everett	104%	Modular Unit	1997	N/A	Replacement School	2001-04	No	Previously Funded
Evergreen	N/A	Modular	1996	N/A				
Falconer	113%				Addition	1999	No	Yes
Field	140%	Modular Unit	1997	N/A	New Area School	2001-04	Yes	Partially Funded
Foster Park	76%				Modular Unit	1999	No	Yes
Gale	68%	Addition	1998	544				
		Modular	1997	N/A				
Garvy	86%				Addition	2001-04	No	No
Goethe	83%							

School Name	98-99 % Capacity	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed	Funded?
Goethe	83%							
Goldblatt	66%				Addition	2001-04	Yes	Partially Funded
Goudy	110%				Addition	2001-04	Yes	No
Graham	66%	Modular Unit	1998	N/A				
Gray	87%	Modular Unit	1997	N/A				
		Addition	1998	576				
Greene	91%	Modular Unit	1996	N/A				
		New School	1998	768				
Grimes	100%							
Grissom	68%				Modular Unit	1999	No	Yes
Guggenheim	88%				Addition*	2001-04	Yes	Previously Funded
Hale	85%						No	No
Hamline	88%	Modular Unit	1996	N/A				
Hammond	95%							
Hanson Park	71%	Annex	1996	288				
Harvard	90%							
Haugan	97%				New Area School*	2001-04	Yes	Previously Funded
Hayt	96%							
Healy	91%							
Hedges	100%							
Henry	101%	Modular Unit	1999	N/A				
		Annex	1997	320				
Hibbard	65%	Addition	1998	768				
Holden	88%							
Hope	55%				Addition	2001-04	No	No
Hoyne	59%	Addition	1998	64				
Hurley	114%	Annex	1996	320				
		Modular Unit	1998	N/A				

School Name	98-99 % Capacity	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed	Funded?
Inter-American Magnet	68%				Replacement School	2001-04	Yes	Previously Funded
Irving	79%							
Jamieson	97%				Addition	2001-04		No
Jenner	30%				Replacement School	1999	No	Yes
Jordan	98%				New Area School	2001-04	No	Previously Funded
Kanoon	102%	Modular Unit	1997	N/A				
Keller Magnet	90%	New School	1998					
Kellogg	93%				Addition	2001-04	No	No
Key	95%							
Kilmer	88%	Addition	1996	480				
Langston Hughes	119%	Modular Unit	1998	N/A	Modular Unit	2000	No	Yes
					Replacement School	2001-04	No	No
LaSalle	83%							
Laura S. Ward	81%							
Lee	82%	Annex	1996	320				
Leland	95%	Modular	1998	N/A				
Lenart	146%				Addition	2001-04		No
Lewis	64%	Addition	1998	840				
Libby	62%				Addition	2001-04	No	No
Linne	103%							
Lloyd	123%				Addition	1999	No	Yes
Locke	72%	Addition	1998	416				
Lovett	70%	Annex	1996	288				
Lyon	84%	Addition	1998	760				
Marquette	138%					2001-04	No	No
Marsh	121%	Modular	1997	N/A		2001-04	Yes	No
Mays	71%	Modular Unit	1998	N/A	New Area School	2001-04	Yes	No
McAuliffe	83%							
McCormick	91%							

School Name	98-99 % Capacity	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed	Funded?
McDowell	91%							
McNair Center	N/A				New Area School	2001-04	No	Partially Funded
McPherson	66	Addition	1998	480				
Metcalfe	85%				Addition	2001-04	No	No
Mireles	62%	Modular	1998	N/A				
Mitchell	88%				Replacement School	2001-04	Yes	Previously Funded
Moos	73%				Addition	2001-04	Yes	Previously Funded
Morrill	88%				Modular Unit	1998	Yes	Yes
					New Area School	2001-04	Yes	Previously Funded
Morse	89%							
Mozart	84%							
Munoz Marin	120%							
Murray	72%				Addition	2001-04	Yes	Partially Funded
Nightingale	82%	Addition	1997	448				
Ninos Heroes	95%	Modular	1998	N/A				
		Modular	1998	N/A				
Nobel								
Ogden								
Oglesby	105%				Addition*	2001-04	Yes	No
Oriole Park								
Orozco	82%				Replacement School	1999	No	Yes
Palmer	88%	Annex	1996	320				
Pasteur	100%							
Peabody	62%				Addition	2001-04	No	No
Peck	135%	Annex	1996	384				
		Modular	1997	N/A				
Peirce	110%	Modular	1997	N/A	Addition	1998		Yes
Pershing								
Peterson						2001-04	No	No
Pickard	117%				Addition	2001-04	Yes	Partially Funded

School Name	98-99 % Capacity	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed	Funded?
Pilsen	93%							
Portage Park	98%				Addition	1999	No	Yes
Powell	87%	Modular Unit	1998	N/A	*			
Prussing	114%				Addition	2001-04	No	No
Pullman	87%							
Randolph	74%	Annex	1998	384				
Reilly	139%	Addition	1996	405	*			
Reinberg	101%	Annex	1996	416	*			
Ruiz	90%				New Area School	2001-04	Yes	No
Sauganash	80%				Addition	2000	No	Previously Funded
Sawyer	185%	New School	1997	775				
Scammon	100%	Modular Unit	1996	N/A	*			
		Annex	1997	448				
Schubert	107%	Annex	1996	320	*			
Seward	138%				Addition	2001-04	No	No
Shoop	73%				Addition	2001-04	Yes	Partially
Shields	139%				*			
Skinner	37%				Replacement School	2001-04	No	No
Smyser	74%	Annex	1998	384				
South Loop School	57%				New Area School	2000-04	Yes	Previously Funded
Stevenson	75%				Modular Unit	1999	No	Yes
Stock	N/A				Replacement School	2001-04	Yes	Previously Funded
Stowe	89%				Addition	2001-04	No	No
Sullivan	117%				New School	2001-04	Yes	Previously Funded
Sutherland	79%	Annex	1996	192				
Swift	49%	Addition	1998	960				
Taylor	79%	Annex	1996	192				
Telpochcalli	49%				Addition	2001-04	No	No

School Name	98-99 % Capacity	Completed Projects			Future Projects			
		Type	Year	Capacity	Type	Year	Delayed	Funded?
Thorp	85%							
Tonti	100%	Annex	1996	384	•			
Twain	110%	Modular Unit	1997	N/A	Addition	2001-04	No	No
Vanderpoel	83%							
Volta	79%	Annex	1996	384				
Walsh	57%	Addition	1998	160				
Van Vlissingen	85%				Replacement School	1998	Yes	Yes
Von Humboldt	81%							
Warren	62%				Replacement School	2001-04	Yes	No
George Washington	68%	Annex	1996	320				
Harold Washington	81%	Modular Unit	1998	N/A				
Waters	93%				Replacement School	2001-04	Yes	Previously Funded
Webster	92%							
White	109%				Addition	2001-04	No	No
Whitney	108%	Modular Unit	1998	N/A	•			
Whittier	97%							
Woods	81%							
Yates	69%	Annex	1998	224				
Young	79%	Addition	1998	896				
Zapata	92%				•			

* Schools marked with an asterisk (*) are slated for a new area school designed to alleviate overcrowding at several nearby schools. For example, the new Addams/Gallistel area school will take students from both the existing Addams and the existing Gallistel schools, reducing overcrowding at each location. The schools that fall into this category are:

School	Type	Year	Delayed?	Funded?
Addams/Gallistel Area	New Area School	2001-2004	No	No
Avondale/Darwin	New Area School	2001-2004	No	No
Barry/Monroe (Roque de Duprey)	New Area School	2001-2004	No	No
Bradwell/Powell Area	New Area School	2001-2004	No	No
Cameron/Casals/Munoz Marin Area	New Area School	2001-2004	No	No
Castellanos/Little Village/McCormick Area	New Area School	2001-2004	No	No
Davis/Shields Area (I)	New Area School	2000	Yes	Yes
Davis/Shields Area (II)	New Area School	2001-2004	No	No
Haugan/Henry Area	New Area School	2001-2004	No	No
Hurley/Pasteur Area	New Area School	2001-2004	No	No
Kanoon/Hammond Area	New Area School	2001-2004	No	No
Kilmer/Hayt/Boone Area	New Area School	2001-2004	No	No
Oglesby/Guggenheim Area	New Area School	2001-2004	Yes	No
Reilly/Scammon Area	New Area School	2001-2004	No	No
Reinberg/Lyon/Schubert Area	New Area School	2001-2004	No	No
Tonti-Peck (Sandoval)	New Area School	1998	Complete	Complete
Whitney/Zapata Area	New Area School	2001-2004	No	No

Appendix Six
The Effect of Capacity Additions on Elementary School Overcrowding

How to Use This Table: The following table shows how successful additions and annexes have been in reducing overcrowding over time. The table shows the design capacity and level of overcrowding before the addition, the new capacity of the school, then the enrollment and level of crowding (if any) for both one and two years after the addition went into service.

			Before Project				1 Year After			
School Name	Project	Year	Design Cap.	# Students	% Cap.	New Capacity	# Students	% Capacity	# Students	% Capacity
Addams School	Annex	97	374	445	119%	630	503	79.8%	671	107%
Armstrong School	Addition	95	690	821	119%	780	992	127%	1085	139%
Barry School	Annex	97	620	660	106%	940	659	70%	780	83%
Bass School	Addition	95	975	782	80%	1065	750	70%	727	68%
Bateman School	Addition	98	1000	1018	102%	1256	1023	81%	N/A	N/A
Beaubien School	Annex	97	786	597	76%	1170	857	73%	902	77%
Boone School	Addition	97	1110	1023	92%	1200	1020	85%	1118	93%
Bright School	Annex	98	630	608	97%	886	615	69%	N/A	N/A
Budlong School	Annex	97	894	966	108%	1150	999	87%	1027	89%
Cameron School	Annex	97	1041	1200	115%	1425	1235	87%	1315	92%
Carroll School	Branch	97	410	589	144%	1035	773	75%	1078	104%
Carson	Addition	97	610	770	126%	1300	726	56%	1220	93%
Corkery School	Addition	94	930	993	107%	1020	976	96%	990	97%
Dore School	Annex	97	220	319	145%	540	342	63%	408	76%
Eberhart School	Addition	98	870	1080	124%	1400	1265	90%	N/A	N/A
Edwards School	Annex	97	801	837	104%	1185	815	69%	954	81%
Gale Academy	Addition	98	972	998	103%	1516	1029	68%	N/A	N/A
Gompers School	Addition	95	555	527	95%	645	543	84%	511	79%
Gray School	Addition	98	780	978	125%	1356	1186	88%	N/A	N/A

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			Before Project				1 Year After			
School Name	Project	Year	Design Cap.	# Students	% Cap.	New Capacity	# Students	% Capacity	# Students	% Capacity
Greene	Replace. School	98	570	679	119%	1338	768	91%	N/A	N/A
Hamline Branch	Branch	95	505	792	157%	1195	778	65%	1151	96%
Hanson Park School	Annex	97	1211	1100	91%	1595	1098	69%	1137	71%
Haugan School	Addition	94	1550	542	35%	1650	1388	84%	1450	88%
Hayt School	Addition	94	710	901	127%	1160	906	78%	882	76%
Healy Annex	Annex	94	1046	1181	113%	1510	1277	85%	1358	90%
Henry School	Annex	97	645	784	122%	965	767	79%	976	101%
Hibbard School	Addition	98	1040	1033	99%	1808	1179	65%	N/A	N/A
Hoyne School	Addition	98	355	246	69%	419	246	59%	N/A	N/A
Hurley School	Annex	97	510	684	134%	830	741	89%	943	114%
Keller	Repl. School	98	210	175	83%	256	230	89%	N/A	N/A
Kilmer School	Addition	97	980	1269	129%	1460	1247	85%	1287	88%
Lee School	Annex	97	454	419	92%	774	457	59%	638	82%
Lewis School	Addition	98	670	879	131%	1510	973	64%	N/A	N/A
Locke School	Addition	98	830	894	108%	1246	900	72%	N/A	N/A
Libby School	Addition	89	820	1129	138%	1495	1079	72%	921	62%
Lovett School	Annex	97	677	572	84%	965	572	59%	671	70%
Lozano Bilingual	Addition	94	810	937	116%	1375	869	63%	925	67%
Lyon School	Addition	98	905	1134	126%	1665	1402	84%	N/A	N/A
Marquette School	Addition	97	1240	1551	125%	2050	2227	109%	2823	138%

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			Before Project				1 Year After			
School Name	Project	Year	Design Cap.	# Students	% Cap.	New Capacity	# Students	% Capacity	# Students	% Capacity
McKay School	Addition	97	412	1034	251%	1500	1174	78%	1431	95%
McPherson	Addition	98	850	991	117%	1330	881	66%	N/A	N/A
Nightingale School	Addition	97	1044	1183	113%	1652	1242	75%	1359	82%
Onahan School	Addition	95	535	352	66%	625	392	63%	442	71%
Palmer School	Annex	97	560	618	110%	880	635	72%	773	88%
Pasteur School	Annex	97	565	624	110%	885	715	81%	888	100%
Peck School	Annex	97	560	857	153%	985	1014	103%	1325	135%
Randolph Magnet	Annex	98	985	966	98%	1369	1012	74%	N/A	N/A
Ray School	Addition	97	990	728	74%	1200	780	65%	804	67%
Reilly School	Addition	97	810	1473	182%	1215	1596	131%	1686	139%
Reinberg School	Annex	97	599	790	132%	1015	823	81%	1029	101%
Scammon School	Annex	97	582	856	147%	1030	950	92%	1027	100%
Schubert School	Annex	97	1192	1119	94%	1512	1369	91%	1625	108%
Smyser School	Annex	98	715	658	92%	1099	813	74%	N/A	N/A
Sutherland School	Annex	97	688	650	94%	880	671	76%	701	79%
Swift School	Addition	98	720	783	109%	1680	818	49%	N/A	N/A
Taylor School	Annex	97	798	568	71%	990	586	59%	788	79%
Tonti School	Annex	97	851	1072	126%	1235	1083	88%	1234	100%
Volta School	Annex	97	826	878	106%	1210	912	75%	961	79%
Walsh School	Addition	98	745	399	54%	905	518	57%	N/A	N/A

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			Before Project				1 Year After			
School Name	Project	Year	Design Cap.	# Students	% Cap.	New Capacity	# Students	% Capacity	# Students	% Capacity
George Washington School	Annex	97	660	636	96%	980	656	67%	670	68%
Whitney School	Addition	92	455	1095	241%	1020	1159	114%	1217	119%
Yales School	Annex	98	1440	1077	75%	1664	1145	69%	N/A	N/A
Young School	Addition	98	1200	1156	96%	2096	1648	79%	N/A	N/A

Appendix Seven:

Congressional Action

More information on these proposals may be found at http://thomas.loc.gov.

Major House Bills

Bill Number: H.R. 1660
Title: "Public School Modernization Act of 1999"
Date Introduced: May 4, 1999

Sponsor: Charles B. Rangel (D-NY). Rep. Rangel is the ranking member of the House Ways and Means Committee, which has primarily jurisdiction over the legislation, and the Deputy Democratic Whip for the House of Representatives.
# of Democratic Cosponsors: 198
# of Republican Cosponsors: 3

Summary: Rangel is the House sponsor for the version of the construction legislation proposed by the Clinton Administration and the U.S. Dept. of Education. The proposal will provide will provide federal tax credits for investors in lieu of the interest payments they would typically receive. President Clinton's Fiscal Year 2000 budget proposal includes tax credits sufficient to cover the interest on up to $25 billion worth of local bonds – enough, the administration contends, to build or modernize 6,000 schools. *It is important to make clear that the federal government is not dedicating $25 billion to school construction and repair.* The U.S. Treasury Dept. estimates that the cost to taxpayers will be about $3.7 billion over five years. The Joint Committee on Taxation's estimate is $3.1 billion. In other words, the federal government is only providing another $3.7 billion or so for school repairs and construction. The proposal has two components:

- **School Modernization Bonds:** The budget contains tax credits that would enable $22 billion in school modernization bonds over two years ($11 billion each in 2000 and 2001). These funds would be allocated in two separate ways. Half of the credits – representing $11 billion in bonding capacity – will be available directly to the 100 school districts that serve the largest number of low-income children. The other half will be distributed to states, which can then decide how the bonds should be distributed among school districts. In order to qualify for these funds, the state must submit to the Secretary of Education a recent study of statewide school repair and construction needs, a description of how the funds will be spent, and an assurance that school districts with the greatest need will receive highest priority.

- **Expanded "Rangel Bonds":** As discussed above, the Clinton proposal would expand the use of Qualified Zone Academy Bonds for Fiscal Years 2000 and 2001, resulting in an additional $2.4 billion in bonding capacity for eligible schools. For a description of how Rangel bonds currently work, please see the conclusion to this report.

In addition, the Administration is proposing a $10 million initiative intended to "design schools as centers of community." School districts would be able to submit proposals on a competitive basis for grants to develop partnerships between school boards and the community, draft a "school system master plan," and develop site plans for individual school facilities.

Legislative Action During 1999: The legislation was referred to the Committee on Ways and Means and the Committee on Education and the Workforce. Several witnesses at a June 23, 1999, Ways and Means Committee hearing testified on the proposal. No votes were taken in either committee on the legislation during 1999, though Rangel did introduce it as part of a Democratic tax cut proposal toward the close of the first session of the 106th Congress. Rangel's substitute legislation failed by a vote of 173-258. The Republican tax cut proposal (H.R.2488, which also contained language on school construction similar to the proposal in H.R.2) passed 223-308, and was later vetoed by President Clinton.

Bill Number: H.R. 1760
Title: "America's Better Classrooms Act of 1999"
Date Introduced: May 11, 1999

Sponsor: Rep. Nancy L. Johnson (R-CT)
# of Democratic Cosponsors: 21
# of Republican Cosponsors: 29

Summary: Rep. Johnson's legislation is very similar to the legislation introduced by Rep. Rangel. The one major difference is how the tax credits are allocated. Under Johnson's proposal, half of the funds would be allocated among the states proportionally based on the basic education grants it received during the most recent fiscal year under the Elementary and Secondary Education Act of 1965. The other half will be allocated among the states based on the number of children between the ages of five and 18.

Legislative Action During 1999: The legislation was referred to the Committee on Ways and Means and the Committee on Education and the Workforce. No further legislative action was taken on the bill during 1999.

Bill Number: H.R. 2
Bill Names: "Dollars to the Classroom Act" or "Education Flexibility Partnership Act of 1999"
Date Introduced: February 11, 1999

Sponsor: Rep. William F. Goodling (R-PA). Rep. Goodling is the Chairman of the House Committee on Education and the Workforce.
# of Democratic Cosponsors: 2
# of Republican Cosponsors: 16

Summary: This legislation deals with a range of educational issues, much of which does not apply to the issue of school construction or repair. The relevant part of the bill modifies the arbitrage laws that affect school districts, giving them more time and flexibility in how they spend their bond funds.

Legislative Action During 1999: The legislation was referred to the Committee on Ways and Means and the Committee on Education and the Workforce. The education committee held hearings on the legislation during the first part of October 1999, and passed the bill 42-6 on October 18. The Ways and Means Committee passed the bill onto the House floor, though it so far has not seen action. A version of the arbitrage proposal also appeared in the Republican tax cut plan (H.R.2488) that was passed by the House 223-208 and later vetoed by President Clinton.

Bill Number: H.R.1648
Bill Name: "State Infrastructure Banks for Schools Act of 1999"
Date Introduced: April 29, 1999

Sponsor: Rep. Ellen O. Tauscher (D-CA)
# of Democratic Cosponsors: 46
# of Republican Cosponsors: 2

Summary: Rep. Tauscher's proposal would allow states (or groups of states) to establish state infrastructure banks that will make loans to local school districts for the purpose of repairing existing schools and public libraries and building new ones. Initial funding for the bank will come from federal grants. For each loan given out by the infrastructure bank, the state must match 25 percent of the value of the loan with non-federal funds. Loans can be for part or all of the cost of the project.

Legislative Action During 1999: The legislation was referred to the House Committee on Education and the Workforce, but saw no further legislative action during 1999.

Bill Number: H.R.2469
Bill Name: "State Revolving Funds for Schools Act"
Date Introduced: July 12, 1999

Sponsor: Rep. Robert E. Andrews (D-NJ)
# of Democratic Cosponsors: 0
# of Republican Cosponsors: 0

Summary: Rep. Andrews' revolving loan fund proposal is very similar to the state infrastructure bank legislation proposed by Rep. Tauscher in H.R.1648, described above.

Legislative Action During 1999: Rep. Andrews' bill was referred to the House Committee on Education and the Workforce upon its introduction, but has seen no further legislative activity.

Other House Bills on School Capital Funding:

- H.R.340, sponsored by Rep. Robert Andrews (D-NJ), would expand and extend the use of Qualified Zone Academy Bonds ("Rangel Bonds"). Under Andrews' proposal, the federal government would pay the interest on $13.7 million for the year 2000 and $13.7 million for 2001.
- H.R.415, sponsored by Rep. Loretta Sanchez (D-CA) is another variation on the idea of giving tax credits to the holders of school construction bonds. Sanchez's bill, which has 54 cosponsors, would also require a private business contribution for each local school construction or repair project funded under the act, and limits the holders of the bonds to banks, insurance companies, and corporations.
- H.R.635, introduced by Rep. Mac Collins (R-GA), would allow the use of block grants under the Temporary Assistance to Needy Families (TANF) program to be used for classroom construction and teacher hiring. The bill was referred to the House Ways and Means Committee in February, but has seen no further legislative activity.
- H.R. 996, sponsored by Rep. Bob Etheridge (D-NC), is very similar to Rangel's legislation and to the Clinton Administration proposal. In fact, Rangel is among the 64 cosponsors of the bill.
- H.R.1084, sponsored by Rep. Jennifer Dunn (R-WA), deals with a number of tax-related topics, most of which do not apply to education, but it does include the Republican-backed arbitrage relief rules included in H.R.2 and other bills. Rep. Dunn's legislation has 23 cosponsors, but has not seen any further legislative action since it was referred to the House Ways and Means committee on March 11, 1999.

- H.R.1767, sponsored by Rep. Robert Andrews, (D-NJ) is a Democratic version of the proposal to relax the arbitrage rules on school construction bonds, similar to the changes proposed in H.R.2.
- H.R. 2514, introduced by Rep. Claw Shaw (D-FL), closely mirrors legislation introduced in the Senate by Finance Committee Chairman William Roth (S.1134). See below for a description of Sen. Roth's legislation.

Major Senate Bills

Bill Number: S.1454
Bill Name: "Public School Modernization and Overcrowding Relief Act of 1999"
Date Introduced: July 28, 1999

Sponsor: Sen. Charles S. Robb (D-VA)
# of Democratic Cosponsors: 21
# of Republican Cosponsors: 0

Summary: Sen. Robb's legislation closely mirrors the bill offered by Rep. Rangel on the House side. The major difference is that Robb's proposal also includes the Republican-backed arbitrage proposal similar to the one contained in Rep. Goodling's H.R.2. While the bill appears designed to win bipartisan support, so far it has not attracted any Republican cosponsors. Sen. Robb's legislation incorporates an earlier bill (S.223) introduced on January 19, 1999, by Sen. Frank Lautenberg (D-NJ).

Legislative Action During 1999: Sen. Robb's bill was referred to the Senate Finance Committee on July 28, 1999, and has seen no further legislative activity.

Bill Number: S.7
Bill Name: "Public Schools Excellence Act"
Date Introduced: January 19, 1999

Sponsor: Sen. Tom Daschle (D-SD)
# of Democratic Cosponsors: 27
# of Republican Cosponsors: 0

Summary: Sen. Daschle, the Senate Minority Leaders, proposes a package of education reforms and funding improvements similar to that forwarded by the Clinton Administration. The funding allocation is somewhat different from the Clinton and Rangel proposals, however. Daschle's bill would allow for $1.4 billion in Qualified Zone Academy Bonds for 2000 and 2001 (compared to $1.2 billion in the Rangel bill), with no limitations on the bonds after 2001. For the more general school construction bonds, the Daschle proposal would pay the interest on $9.7 billion in bonds for 2000 and 2001 (compared to $11 billion per year in the Rangel bill), with no limitations after 2001.

Legislative Action During 1999: Sen. Daschle's bill was referred to the Senate Health, Education, Labor and Pensions Committee on January 19, 1999, but has seen no further legislative activity.

Bill Number: S.1134
Bill Name: "Affordable Education Act of 1999"
Date Introduced: May 26, 1999

Sponsor: Sen. William V. Roth, Jr.. Sen. Roth is the Chairman of the Senate Finance Committee.
# of Democratic Cosponsors: 0
# of Republican Cosponsors: 0

Summary: Sen. Roth's legislation incorporates the Republican-backed arbitrage proposals forwarded in H. R.2, and expands the use of tax-exempt facility bonds to public school construction and repair (including the acquisition of land to build new schools). The bill also allows proceeds from the bonds to be used for "public-private partnerships" in which a private company constructs, renovates, or equips a school facility, then transfers the school back to the school district at the end of a specified amount of time. The term of the agreement cannot be longer than the time it takes to pay off the bond.

Legislative Action During 1999: Sen. Roth's legislation passed the Senate Finance Committee by a vote of 12-8 and was reported to the full Senate on May 26, 1999. The bill has seen no further legislative activity.

Bill Number: S. 950
Bill Name: "Excellence in Education Act of 1999"
Date Introduced: May 4, 1999

Sponsor: Sen. Dianne Feinstein (D-CA)
# of Democratic Cosponsors: 0
# of Republican Cosponsors: 0

Summary: Sen. Feinstein's legislation would authorize Congress to make up to $1 billion worth of direct grants to public school districts for each year from 2000 through 2004 for the construction of new school facilities. School districts would also have to match 100 percent of the federal funds with state or local revenues. The bill puts a number of restrictions on these grants, however. Class size in the new facilities must be limited to 20 students per teacher in elementary schools, and 28 to 1 in middle and high schools. Elementary schools would be limited to no more than 500 students; middle schools would be limited to 750 students; and high schools would be limited to no more than 1,500 students. Schools receiving grants would also be required to meet certain educational and testing standards. This legislation closely mirrors another bill introduced by Sen. Feinstein (S.852) introduced on April 21, 1999.

Legislative Action During 1999: Sen. Feinstein's legislation was referred to the Senate Health, Education, Labor and Pensions Committee on May 4, 1999, but has seen no further legislative activity.

Bill Number: S.526
Bill Name: "Public School Construction Partnership Act"
Date Introduced: March 3, 1999

Sponsor: Sen. Bob Graham (D-FL)
# of Democratic Cosponsors: 4
# of Republican Cosponsors: 6

Summary: A Democratically sponsored version of Sen. Roth's legislation (S.1134).

Legislative Activity During 1999: Sen. Graham's bill was referred to the Senate Finance Committee on March 3, 1999, and has seen no further legislative activity.

Other Senate Legislation on School Construction Funding:

S. 551, sponsored by Sen. Dianne Feinstein (D-CA), is the companion bill to H.R.415, introduced by Rep. Loretta Sanchez (D-CA), which is described above.

Cosponsors of Major Senate Legislation

Democrats	Republicans	State	S.7	S. 526	S. 1134	S. 1454
Lincoln, Blanche		Arkansas				X
Boxer, Barbara		California	X			
Feinstein, Dianne		California	X	X		
Dodd, Christopher J.		Connecticut	X			X
	Roth Jr., William	Delaware			X	
Biden, Joseph R., Jr.		Delaware				X
Graham, Bob		Florida		X		
Cleland, Max		Georgia	X			X
Akaka, Daniel K.		Hawaii	X			X
Durbin, Richard J.		Illinois	X			X
	Grassley, Chuck	Iowa		X		
Harkin, Tom		Iowa	X			X
Breaux, John		Louisiana	X			
Landrieu, Mary		Louisiana	X			
Mikulski, Barbara		Maryland	X			
Sarbanes, Paul S.		Maryland	X			
Kennedy, Edward M.		Massachusetts	X			X
Kerry, John F.		Massachusetts	X			X
Levin, Carl		Michigan	X			X
Wellstone, Paul D		Minnesota	X			X
Baucus, Max		Montana	X			X
Edwards, John		N. Carolina				
	Hagel, Charles	Nebraska		X		
Kerrey, Robert J.		Nebraska		X		X
Bryan, Richard H.		Nevada	X			
Reid, Harry M.		Nevada	X	X		X
Lautenberg, Frank R.		New Jersey	X			X
Torricelli, Robert G		New Jersey	X	X		X
Schumer, Charles E.		New York	X			X
Conrad, Kent		North Dakota				X
Dorgan, Byron		North Dakota	X			
	De Wine, Mike	Ohio		X		
Hollings, Ernest		South Carolina		X		
Daschle, Thomas A.		South Dakota	X			X
Johnson, Tim		South Dakota	X			X
	Hutchison, Kay Bailey	Texas		X		
	Hatch, Orrin	Utah		X		
Robb, Charles S.		Virginia	X			X
	Gorton, Slade	Washington		X		
Murray, Patty		Washington	X			X
Rockefeller, John D. IV		West Virgina	X			

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Cosponsors of Major House Legislation

Democrats	Republicans	State	H.R.2	H.R. 1648	H.R. 1660	H.R. 1760
Cramer, Robert E.		Alabama			X	
Hilliard, Earl F.		Alabama			X	
Faleomavaega, Eni F. H.		Alaska		X	X	
Pastor, Ed		Arizona			X	
Snyder, Vic		Arkansas		X	X	X
	Horn, Stephen	California				X
	Kuykendall, Steven	California	X			X
Becerra, Xavier		California			X	
Berman, Howard L.		California			X	
Brown, George (deceased)		California		X		
Capps, Lois		California			X	
Condit, Gary A.		California		X		
Dixon, Julian C.		California			X	
Dooley, Calvin M.		California		X	X	
Eshoo, Anna G.		California		X	X	
Farr, Sam		California			X	
Filner, Bob		California		X	X	
Lantos, Tom		California		X	X	
Lee, Barbara		California			X	X
Lofgren, Zoe		California		X	X	
Martinez, Matthew G		California		X	X	
Matsui, Robert T.		California			X	
	McKeon, Howard	California	X			
Millender-McDonald, Juanita		California			X	
Miller, George		California			X	X
Napolitano, Grace F.		California			X	
Pelosi, Nancy		California		X	X	
Roybal-Allard, Lucille		California			X	
Sanchez, Loretta		California			X	
Sherman, Brad		California		X	X	
Stark, Fortney Pete		California		X	X	
Tauscher, Ellen O.		California		X	X	

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Democrats	Republicans	State	H.R.2	H.R. 1648	H.R. 1660	H.R. 1760
Thompson, Mike		California			X	
Waters, Maxine		California		X	X	
Waxman, Henry A.		California			X	
Woolsey, Lynn C.		California			X	
DeGette, Diana		Colorado			X	
Udall, Mark		Colorado			X	
	Johnson, Nancy L.	Connecticut				X
DeLauro, Rosa L.		Connecticut			X	
Gejdenson, Sam		Connecticut			X	
Larson, John B.		Connecticut			X	
Maloney, James H.		Connecticut		X	X	
Norton, Eleanor (delagate)		D.C.			X	
	Castle, Michael	Delaware	X			
	Diaz-Balart, Lincoln	Florida				X
	Ros-Lehtinen, Ileana	Florida				X
	Weldon, Dave	Florida				X
Brown, Corrine		Florida			X	
Davis, Jim		Florida			X	
Deutsch, Peter		Florida			X	
Hastings, Alcee L.		Florida			X	
	McCollum, Bill	Florida	X			
Meek, Carrie P.		Florida			X	
Thurman, Karen L.		Florida			X	
Wexler, Robert		Florida			X	
Bishop Jr., Sanford D.		Georgia			X	
Lewis, John		Georgia		X	X	
McKinney, Cynthia A.		Georgia			X	
Underwood, Robert A.		Guam (delegate)			X	
Abercrombie, Neil		Hawaii			X	
Mink, Patsy T.		Hawaii			X	
	Shimkus, John	Illinois				X
Blagojevich, Rod R.		Illinois			X	

Democrats	Republicans	State	H.R.2	H.R. 1648	H.R. 1660	H.R. 1760
Costello, Jerry F.		Illinois			X	
Davis, Danny K.		Illinois		X	X	
Evans, Lane		Illinois			X	
Guiterrez, Luis V.		Illinois			X	
Jackson, Jr., Jesse L.		Illinois			X	
Lipinski, William O.		Illinois			X	
Phelps, David D.		Illinois		X	X	
Rush, Bobby L.		Illinois			X	
Schakowski, Janice D.		Illinois			X	
Carson, Julia		Indiana			X	
Hill, Baron P.		Indiana		X	X	
Rep Roemer, Tim		Indiana		X		
Visclosky, Peter J.		Indiana			X	
	Leach, James A.	Iowa				X
Boswell, Leonard L.		Iowa			X	
	Moran, Jerry	Kansas				X
Moore, Dennis		Kansas			X	X
Lucas, Ken		Kentucky			X	
Jefferson, William J.		Louisiana		X	X	
Allen, Thomas H.		Maine			X	
Baldacci, John Elias		Maine			X	X
	Gilchrest, Wayne	Maryland		X		X
	Morella, Constance	Maryland				X
Cardin, Benjamin L.		Maryland			X	
Cummings, Elijah E.		Maryland		X	X	X
Hoyer, Steny H.		Maryland			X	
Wynn, Albert Russell		Maryland			X	
Capuano, Michael E.		Massachusetts			X	
Delahunt, William D.		Massachusetts			X	
Frank, Barney		Massachusetts			X	
Markey, Edward J.		Massachusetts			X	
McGovern, James P.		Massachusetts		X	X	X
Meehan, Martin T.		Massachusetts			X	
Moakley, John Joseph		Massachusetts			X	
Neal, Richard E.		Massachusetts		X	X	
Oliver, John W.		Massachusetts			X	

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Democrats	Republicans	State	H.R.2	H.R. 1648	H.R. 1660	H.R. 1760
Tierney, John F.		Massachusetts		X	X	
Barcia, James A.		Michigan			X	X
Bonior, David E.		Michigan			X	
Conyers, John, Jr.		Michigan		X	X	
Dingell, John D.		Michigan		X	X	
Kildee, Dale E.		Michigan			X	
Kilpatrick, Carolyn C.		Michigan			X	
Levin, Sander M.		Michigan			X	
Rivers, Lynn N.		Michigan			X	
Stabenow, Debbie		Michigan		X	X	X
Stupak, Bart		Michigan			X	
Minge, David		Minnesota				X
Oberstar, James L.		Minnesota			X	
Vento, Bruce F.		Minnesota			X	
Shows, Ronnie		Mississippi		X	X	
Thompson, Bennie G.		Mississippi			X	X
Clay, William		Missouri			X	
Danner, Pat		Missouri			X	
Gephardt, Richard		Missouri			X	
	Hulshof, Kenny	Missouri	X			
McCarthy, Karen		Missouri			X	
Skelton, Ike		Missouri			X	
	Hill, Rick	Montana	X			
Berkley, Shelly		Nevada			X	
	Sununu, John	New Hampshire				
	Franks, Bob	New Jersey				X
	LoBiondo, Frank A.	New Jersey				X
	Smith, Christopher	New Jersey				X
Andrews, Robert E.		New Jersey			X	
Holt, Rush D.		New Jersey			X	
Menendez, Robert		New Jersey			X	
Pallone Jr, Frank		New Jersey			X	
Pascrell Jr, Bill		New Jersey			X	
Payne, Donald M.		New Jersey		X	X	

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Democrats	Republicans	State	H.R.2	H.R. 1648	H.R. 1660	H.R. 1760
Rothman, Steven R.		New Jersey			X	
Udall, Tom		New Mexico			X	
	Boehlert, Sherwood L.	New York		X		X
	Gilman, Benjamin	New York				X
	Houghton, Amo	New York				X
	King, Peter T.	New York				X
	Lazio, Rick	New York				X
	McHugh, John M.	New York				X
	Quinn, Jack	New York			X	
	Sweeny, John E.	New York				X
	Walsh, James T.	New York				X
Ackerman, Gary L.		New York			X	
Crowley, Joseph		New York		X	X	
Engel, Eliot L.		New York			X	
Forbes, Michael P.		New York			X	X
Hinchey, Maurice D.		New York		X		
Hinchey, Maurice D.		New York			X	
LaFalce, John J.		New York			X	
Lowey, Nita M.		New York			X	
Maloney, Carolyn B.		New York			X	
McCarthy, Carolyn		New York			X	
McNulty, Michael R.		New York			X	
Meeks, Gregory W.		New York			X	
Nadler, Jerrold		New York			X	
Owens, Major R.		New York			X	X
Rangel, Charles B.		New York			X	
Serrano, Jose E.		New York			X	
Slaughter, Louise		New York			X	
Towns, Edolphus		New York			X	
Velasquez, Nydia M.		New York		X	X	
Weiner, Anthony D.		New York		X	X	
	Ballenger, Cass	North Carolina	X			
Clayton, Eva M.		North Carolina			X	
Etheridge, Bob		North Carolina		X	X	X
McIntyre, Mike		North Carolina		X	X	

Democrats	Republicans	State	H.R.2	H.R. 1648	H.R. 1660	H.R. 1760
Price, David E.		North Carolina			X	
Watt, Melvin L.		North Carolina			X	
Pomeroy, Earl		North Dakota			X	
	LaTourette, Steven	Ohio			X	X
	Ney, Robert W.	Ohio			X	X
Brown, Sherrod		Ohio			X	
	Gillmore, Paul	Ohio	X			
Hall, Tony P.		Ohio			X	
Jones, Stephanie Tubbs		Ohio			X	
Kaptur, Marcy		Ohio			X	
Kucinich, Dennis J.		Ohio		X	X	
	Pryce, Deborah	Ohio	X			
Sawyer, Tom		Ohio			X	
Strickland, Ted		Ohio			X	
Traficant, James A.		Ohio			X	X
	Lucas, Frank	Oklahoma	X			
Blumenauer, Earl		Oregon			X	
Defazio, Peter A.		Oregon		X	X	X
Hooley, Darlene		Oregon			X	X
Wu, David		Oregon			X	
	English, Phil	Pennsylvania				X
	Greenwood, James C.	Pennsylvania				X
	Sherwood, Don	Pennsylvania				X
	Weldon, Curt	Pennsylvania				X
Borski, Robert A.		Pennsylvania			X	
Brady, Robert A.		Pennsylvania			X	
Coyne, William J.		Pennsylvania			X	
Doyle, Michael F.		Pennsylvania			X	
Fattah, Chaka		Pennsylvania			X	
Hoeffel, Joseph M.		Pennsylvania			X	
Holden, Tim		Pennsylvania		X	X	X
Kanjorski, Paul E.		Pennsylvania			X	
Klink, Ron		Pennsylvania			X	
Mascara, Frank		Pennsylvania			X	
Murtha, John P.		Pennsylvania			X	

Democrats	Republicans	State	H.R.2	H.R. 1648	H.R. 1660	H.R. 1760
	Pitts, Joseph	Pennsylvania	X			
Kennedy, Patrick J.		Rhode Island			X	
Weygand, Robert A.		Rhode Island		X	X	
Clyburn, James E.		South Carolina			X	X
Spratt, John M.		South Carolina			X	
Clement, Bob		Tennessee			X	
Ford, Jr., Harold E.		Tennessee			X	
Gordon, Bart		Tennessee			X	
	Jenkins, William	Tennessee	X			
Tanner, John S.		Tennessee			X	
Bentsen, Ken		Texas			X	
Edwards, Chet		Texas			X	
Frost, Martin		Texas		X	X	
Gonzalez, Charles A.		Texas			X	
Green, Gene		Texas		X	X	X
Hinojosa, Ruben		Texas			X	
Jackson-Lee, Sheila		Texas			X	
Johnson, Eddie Bernice		Texas			X	
Lampson, Nick		Texas		X	X	
Ortiz, Solomon P.		Texas			X	
Rep Jackson-Lee, Sheila		Texas		X		
Reyes, Silvestre		Texas			X	
Rodriguez, Ciro D.		Texas			X	
Sandlin, Max		Texas			X	
	Hansen, James	Utah				
Sanders, Bernard (independent)		Vermont			X	
Christensen, Donna MC		Virgin Islands		X		
	Bliley, Thomas	Virginia	X			
Boucher, Rick		Virginia			X	
Goode, Virgil		Virginia	X			
Moran, James P.		Virginia		X	X	
Pickett, Owen B.		Virginia			X	
Scott, Robert C.		Virginia			X	

Democrats	Republicans	State	H.R.2	H.R. 1648	H.R. 1660	H.R. 1760
Sisisky, Norman		Virginia		X	X	
	Wolf, Frank	Virginia	X			
	Metcalf, Jack	Washington				X
Baird, Brian		Washington			X	X
Dicks, Norman D.		Washington			X	
Inslee, Jay		Washington			X	
McDermott, Jim		Washington			X	
Smith, Adam		Washington	X		X	
Mollohan, Alan B.		West Virginia			X	
Rahall II, Nick J.		West Virginia			X	
Wise, Robert E.		West Virginia			X	
Baldwin, Tammy		Wisconsin			X	
Barrett, Thomas M.		Wisconsin			X	
Kind, Ron		Wisconsin			X	
Kleczka, Gerald D.		Wisconsin			X	

Groups Supporting Federal School Construction Funding Legislation:

According to a list posted on the National Education Association's web site (http://www.nea.org/lac/modern/orglist.html), the following groups support federal school modernization legislation:

American Association of School Administrators
American Federation of Teachers
American Institute of Architects
American Library Association
American Public Works Association
The Arc
ASPIRA
Association of Educational Communications and Technology
Black Leadership Forum
Blacks in Government
Cal-Fed Infrastructure Coalition
Center for Advancement of Public Policy
Committee for Education Funding
Communicating for Agriculture
Congress of National Black Churches
Consortium for School Networking
Council of Chief State School Officers
Council of Great City Schools
Cuban-American National Council
Education and Management Research Institute
General Federal Women's Clubs
League of United Latin American Citizens (LULAC)
National Association for the Advancement of Colored People (NAACP)
National Alliance of Black School Educators
National Association of College Admissions Counselors
National Association of Elementary School Principals
National Commission for African American Education
National Council of La Raza
National Ethnic Coordinating Organization
National Farmers Union
National Grange
National Hispanic Leadership Institute
National Parent Teacher Association
National Puerto Rican Coalition
National Rural Education Association
National School Boards Association
National Urban League
Organizations Concerned About Rural Education
Rainbow/Operation PUSH Coalition
Rebuild America's Schools Coalition
Seventh Day Adventist Church
United Methodist Board of Church and Society
Urban Families Institute
U.S. Conference of Mayors

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Chapter Four:

The National Problem

The problems of overcrowding and crumbling school buildings are not confined to Chicago. Most of the nation's major cities are struggling to find ways to pay for badly needed school improvements. Rural and suburban school districts also are scrambling to cope with aging facilities and rapidly expanding student populations. No corner of the country can escape these challenges.

This chapter compares Chicago's experience to that of the rest of the country, both in terms of school repair and overcrowding. First, it summarizes the growing evidence that there is a national need for more and better school facilities to keep pace with aging buildings and growing enrollments. Then, we present a series of case studies examining the nature of other cities' problems and some of the solutions under consideration. Finally, in the conclusion to this report, we summarize congressional reform proposals and discuss why a national strategy is needed to rebuild our crumbling schools.

Schools in Disrepair

The most comprehensive assessment of the country's school facilities was completed in February 1995 by the U.S. General Accounting Office at the request of five U.S. Senators.[1] The GAO report estimated that the nation needs to invest approximately $112 billion in order to make basic repairs.[2] While the report found that two-thirds of the nation's schools were adequate, 14 million students (about 30 percent of all U.S. students) attended the other 25,000 schools in serious disrepair. Furthermore, 60 percent of all school buildings reported that at least one major building feature needed to be repaired or replaced. These finding confirm the general conclusions of two earlier studies on the condition of America's schools.[3]

The GAO study attributes the poor condition of many school buildings to years – and in some cases decades – of deferred maintenance:

> District officials we spoke to attributed the declining physical condition of America's schools primarily to insufficient funds, resulting in decisions to defer maintenance and repair expenditures from year to year. This has a domino effect. Deferred maintenance speeds up the deterioration of buildings, and costs escalate accordingly, further eroding the nation's multibillion dollar investment in school facilities.[4]

The U.S. General Accounting Office estimated in 1995 that . . .

- The nation needs to invest approximately $112 billion in order to make basic repairs to its schoolhouses.
- While two-thirds of the nation's schools were adequate, 14 million children (about 30 percent) attended the other 25,000 schools in serious disrepair.
- 60 percent of all school buildings reported that at least one major building feature needed to be repaired or replaced.

Importantly, the GAO found that older schools were not necessarily in worse condition that newer ones. "While some studies cite building age as a major factor contributing to deteriorating conditions, older buildings often have a more sound infrastructure than newer buildings," the report concludes. "Buildings built in the early years of this century – or before – frequently were built for a life span of 50 to 100 years while more modern buildings, particularly those built after 1970, were designed to have a life span of only 20 to 30 years."[5]

U.S. public school enrollments have set record highs for 14 straight years.

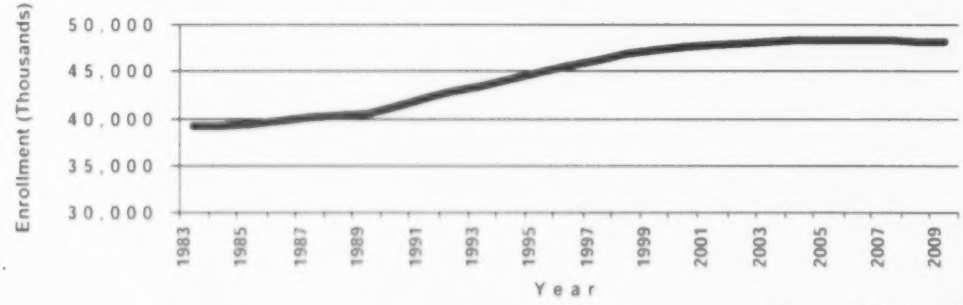
In all, the GAO released seven reports on school buildings between February 1995 and June 1996 covering topics such as finance, technology, school design, and accessibility for students with physical disabilities.[6] In the wake of these reports, there was a rash of articles in newspapers and educational journals highlighting the condition of America's schools and the connection between good buildings and good education. The GAO reports – together with the heightened media attention – formed the basis for the Clinton Administration's 1998 legislative push for more federal funds for school construction. This legislative initiative will be discussed in the conclusion to this report.

Overflowing Classrooms

While there have been several studies of the physical condition of school buildings, there is no comprehensive, nationwide assessment of school overcrowding. The GAO reports limit themselves to such issues as basic maintenance (windows, doors, roofs), environmental dangers (lead paint, asbestos, underground storage tanks), accessibility issues, and technology limitations. The GAO made no attempt to analyze whether schools were overcrowded, or to estimate how many new classrooms would be needed to ease overcrowding. The Senators' decision to exclude overcrowding from the analysis means that **the true cost of rebuilding America's schools is far higher than the $112 billion estimate advanced by the GAO in 1995.**

While no comprehensive report exists documenting the national overcrowding problem, the U.S. Dept. of Education has tracked growing student enrollments the past four years in a series of reports titled *The Baby Boom Echo*. The latest update to the report – released in August 1999 – documents a nationwide enrollment explosion and urges immediate action to assist states and municipalities in their fight against inadequate school facilities.

U.S. Public School Enrollments, 1983 to 2009 (projected)



Source: U.S. Dept. of Education

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School enrollments have increased for 14 straight years, the U.S. Dept. of Education reports. In each of the last four years, enrollments have set a new record high. Nationwide elementary and secondary school enrollment for the 1999-2000 school year is expected to top 53.2 million students – 447,000 more than the previous year. The growth shows no sign of letting up anytime soon. The Dept. of Education's analysis predicts seven more years of increasing enrollments followed by a brief plateau. Then, student populations will begin to grow again:

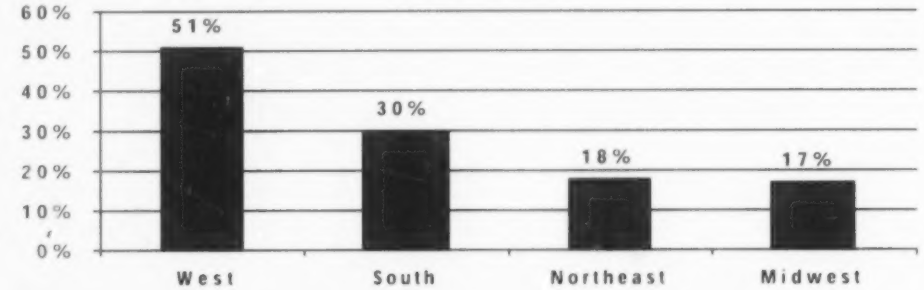
> There is no short-term fix to the very long-term condition of increasing enrollment in our nation's school systems. While many school districts are using portable classrooms and resorting to double sessions, the fact remains that this nation simply has to build more schools. . . . A strong future perspective also suggests that we should be looking down the road to recognize that the children who make up the current baby boom echo will, in time, begin to have their own children and families. This is why it is so important for this nation to build new schools that will last for decades and truly be centers of community and learning for all Americans.[7]

Fastest Growing School Districts, 1987 to 1997

District	Enrollment Increase	% Change
New York City	131,920	14%
Dade County (Miami), FL	92,635	37%
Los Angeles Unified, CA	91,119	15%
Clark County (Las Vegas)	90,795	91%
Broward County FL	87,433	64%
Chicago, IL	58,073	14%
West Palm Beach, FL	52,780	55%
Orange County, FL	44,948	51%
Greensboro, NC	35,919	150%
Lawrenceville, GA	35,462	61%

The overcrowding problem is not limited to a single area of the country, though student populations are growing more quickly in the West and the South. Nor is it limited just to cities, suburbs, or rural areas – most school systems, regardless of their size, are finding that they have more students than they have classrooms to put them in. The Midwest and the Northeast expect to see their student bodies grow about 18 percent between 1999 and 2009. The South expects growth rates of about 30 percent during that period, and the Western states will have to cope with a growth rate of just over 51 percent.[8]

Public School Enrollment Growth, By Region, 1989-2009



Source for both charts on this page: U.S. Dept. of Education: *The Baby Boom Echo: No End in Sight*

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The Rush to Build

All across the country, school districts are scrambling to keep up with the need to build new classrooms and modernize existing buildings. These projects come with a big price tag. The average elementary school constructed in 1998 cost about $7.6 million, the average middle school cost about $12.7 million, and the average high school topped $20.7 million.[9]

While the amount U.S school districts are able to invest in their capital investment programs continues to fall well short of the need, their expenditures are nonetheless impressive. In 1998 alone, U.S. public school systems completed $17.1 billion in capital improvements, $13 billion of which went toward new schools and additions. Between 1999 and 2001, these districts are expected to invest another $46.4 billion in their school districts.[10]

How Much is Really Getting Built?

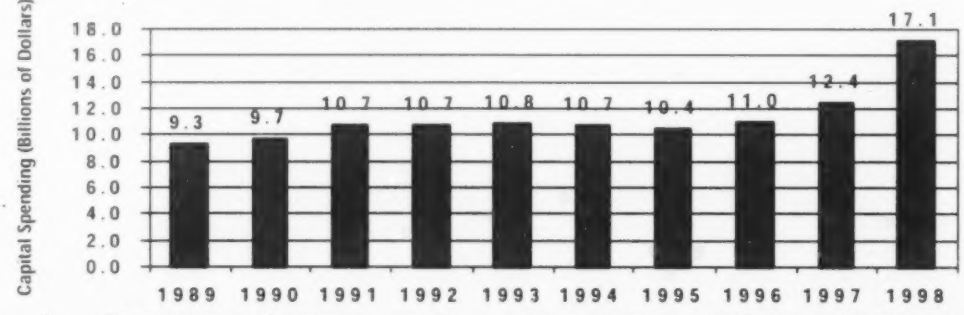
	1998 (Completed)	1999-2001 (Projected)
New Schools	$7.9 billion	$21.6 billion
Additions	$5.1 billion	$12.6 billion
Modernization	$4.1 billion	$12.2 billion
Total	$17.1 billion	$46.4 billion

Over the last decade, the amount spent on school improvements has increased dramatically, from $9.3 billion in 1989 to $17.1 billion in 1998 – an increase of 84 percent. During that period, public school districts have invested a total of $113 billion in school construction and repair.[11]

Still, despite the increase, there remains a dramatic shortfall – even if we use the U.S. General Accounting Office's conservative $112 billion estimate as the benchmark. Of the $17.1 billion in capital funds spent in 1998, 76 percent went to new schools and additions, leaving only about $4.1 billion for the deferred maintenance dealt with by the GAO. This represents an increase from the previous three years, where the amount that went toward school modernization hovered around the $2.7 billion mark. Still, since the GAO report was released in early 1995, ***U.S. school districts have only made about $12.2 billion of the $112 billion worth of improvements identified by the GAO — just 11 percent of the total.***

While substantial national data exists on planned and completed school capital expenditures, there still is no systematic, up-to-date assessment of the need for new classroom capacity. Such a study would be a massive undertaking, but it would shed light on just how widespread the overcrowding problem really is. Until then, policymakers will need to rely on the wealth of anecdotal evidence detailing current conditions as well as the projections of another decade of continued enrollment growth.

U.S. School Construction and Repairs, 1989 to 1998



Source for both charts on this page: *American School and University* "25th Annual Official Education Construction Report."

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Tales From the Front: Stories From Around the Nation

Despite the absence of a nationwide overcrowding assessment, there is an abundance of anecdotal evidence that the one-two punch of overcrowding and deferred maintenance is a crippling problem in many school districts.

New York City:

New York City is the nation's largest and fastest growing school district. It is also the school district for which the most research on overcrowding and capital improvements has been done. The City's school system enrolls almost 1.1 million students, and grew by more than 130,000 students between 1987 and 1997.

> As the nation's largest and fastest growing public school system, New York City faces some of the toughest school construction challenges.

At the beginning of the 1990s, New York City's school buildings were facing a crisis. Almost half of the system's 1,006 school buildings were operating at above 100 percent capacity. Overcrowding was worst at the secondary education level – 71 percent of high schools were overcrowded – though 51 percent of elementary schools and 24 percent of middle schools were above capacity as well.[12]

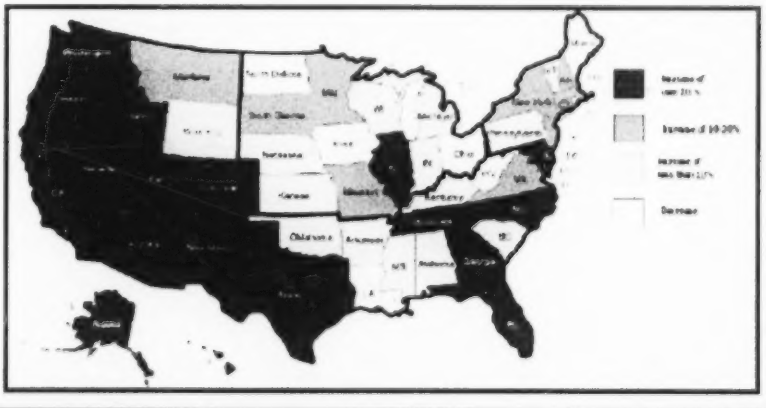
At the beginning of the decade, New York also suffered from crumbling school buildings. In addition to being technologically deficient, 83 percent of the buildings needed capital repairs and 314 buildings required complete modernization. The system's maintenance need was estimated at $5 billion – 13 times larger than the system's 1990 capital budget.[13]

Beginning in 1990, New York undertook a major capital investment program that resulted in almost $5 billion in maintenance and new construction expenditures between 1990 and 1996. About 38 percent of the funds went to new construction, resulting in a 5 percent increase in the system's seating capacity.[14] But despite this intensive investment strategy, New York was unable to keep up with the rapidly growing enrollment:

> The school system was overmatched by the surge in enrollment in the 1990s. An already bad situation was made worse by the Board and the City's policies of reducing spending per student and not pursuing more productive deployment of teachers and more intensive use of school buildings. Consequently, despite record levels of capital investment, crowding worsened and facilities became more deteriorated.[15]

Enrollment Growth by State, 1989 to 2009

The number of school children is increasing coast to coast, not just in the South and West.



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In a 1996 report, the Citizens Budget Commission found that despite the $5 billion in capital investment planned for the first seven years of the 1990s, there was no appreciable change in overcrowding. Half of all elementary schools, one-fifth of all middle schools, and two-thirds of all high schools remained overcrowded. In 1997, New York expanded its capital improvement program from $8.6 billion over 10 years to $10 billion over the same period, but CBC didn't expect that to be enough either.

"Even with this additional investment, only half of the work necessary to bring schools into a state of good repair would be completed, enrollment soon would exceed capacity by as much as 186,000, and only one out of nine schools could be provided with the educational and technological enhancements necessary to support new pedagogical approaches," the report concludes.[16]

In February 1994, then-Chancellor of the New York City Board of Education Ramon Cortines created the Citizens Commission on Planning for Enrollment Growth. One year later, the commission released a set of 11 recommendations for how the school system should proceed. In general, these recommendations focused on alternatives to the intensive capital investment that the School Board had been pursuing, including:

- Extend the school system to a year-around schedule, which the commission contends will increase the capacity of a 750-student building, for example, to about 1,000 students because part of the student body will be on vacation at any given time.
- Focus on leasing more school buildings rather than constructing new ones.
- Make better use of underutilized schools, including changing attendance zones when necessary and locating magnet and specialty schools in facilities with excess capacity.
- Look for partnerships with non-traditional educational outlets for "out-of-school learning environments," including colleges and universities and non-profit institutions. The commission also recommends investigating the possibility of using vacant commercial space for schools.

In addition to these non-traditional approaches, the commission also recommended that New York provide a dedicated revenue stream to fund school construction bonds and pursue more federal funding for school capital needs.[17] So far, New York has pursued more conventional approaches to fighting overcrowding instead of the more systemic changes recommended by the Commission, including a prototype schools program that school officials say makes construction faster and cheaper.

In a 1996 report, New York City's Citizens Budget Commission found that despite the $5 billion in capital investment planned for the first seven years of the 1990s, there was no appreciable change in overcrowding in the New York City school system.

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Miami-Dade County, Florida

As the second-fastest-growing school system in the country, the Miami-Dade County public school system has received considerable attention for its school construction needs. According to the U.S. Dept. of Education, Dade County saw an increase of over 92,000 students between 1987 and 1997 – a 37 percent increase.[18] Some estimates place the district's capital need as high as $11.1 billion.[19]

The first major effort to combat school overcrowding and repair in the district came in 1988, when voters approved a $980 million school bond issue – at the time, the largest school bond in U.S. history. School officials at the time predicted the money would fund a five-year capital improvement program that would result in 250 school renovations and 49 new school buildings. By 1994, a *Miami Herald* study found that 731 construction projects were on the books, and less than half of the 49 promised new schools had been constructed. The cost of the program, the paper reported, had already jumped to almost $1.7 billion.[20]

Overcrowding is a problem throughout Florida. The U.S. Dept. of Education reports that seven of the 25 fastest-growing school districts are located in Florida counties. Government officials have tried to sidestep the size of the problem with sleight-of-hand. In 1997, the Florida legislature passed a bill that would require all school districts to count three-quarters of their portable classrooms – as well as all music rooms, art rooms, and computer labs – as permanent, regular classroom space.

State officials believe that by that measure, Florida's school construction "need" could be as little as $775 million. The law was roundly criticized. "The bill is an attempt to hide the problem," said a spokesman for the Florida Education Association United. "Everyone's doing a lot of denying and finger-pointing, but the bottom line is, we've got overcrowding."[21]

Los Angeles, California

The Los Angeles Unified School District – which includes not only the City of Los Angeles, but also schools in 11 towns and portions of 18 other municipalities – is the nation's third-fastest growing school district. According to the U.S. Dept. of Education, Los Angeles saw an increase of over 91,000 students between 1987 and 1997 – a 15 percent increase.[22]

School officials in Miami-Dade County, Florida, promised the money from a $980 million school bond would fund 250 school renovations and 49 new school buildings. By 1994, a *Miami Herald* study found that less than half of the promised new schools had been constructed and the cost of the program had jumped to almost $1.7 billion.

***Rebuilding Our Schools Brick By Brick* — page 69**

With almost 700,000 students in elementary and high schools, LAUSD has acknowledged the need for a major building campaign. To address these concerns, L.A. voters in April 1997 approved a $2.4 billion construction and repair bond issue known as "Proposition BB." About $900 million of the money will be used to match state funds, help alleviate what Superintendent Ruben Zaccarias calls a "chronic" overcrowding problem, and reduce the number of students that must be bussed to less-crowded facilities.[23]

Los Angeles schools can draw on a variety of sources to meet their capital needs in addition to general obligation bonds such as Proposition BB:

- **Special Local ("Mello-Roos") Bonds:** School districts in California are authorized to form special districts – sub-areas within the main school district – that have the authority to issue school construction bonds. The bonds are then paid with additional taxes levied on the property within these special sub-districts.

- **State Funding:** Much of California school construction and repair funding comes from a state-local partnership called the State School Building Lease-Purchase Program. Eligibility for state funds is based on the number of "unhoused children" in the district, with priority given to school districts that provide 50 percent of the cost of the project and agree to meet some requirements for year-around education at the school. Between 1986 and 1996, California voters have approved $8.8 billion in state general obligation bonds for school capital needs. Passing a state bond issue requires a 50 percent majority in a referendum.

- **Developer Fees:** School districts are authorized to impose developer fees on new residential construction. These fees may be used only for the construction and reconstruction of school buildings. LAUSD has taken this idea a step further with its Facilities Task Force. The Task Force is considering incentives for private developers to include schools in their housing and commercial development plans. In addition, the Task Force has considered tying school capital investment to transit-oriented development in the Los Angeles area. These initiatives seek to leverage public and private investment in unique ways that do not overburden limited school district resources.

- **Parcel Taxes:** School districts throughout California are authorized to impose "parcel taxes" on property within the district, provided the tax rate on each type of property is the same – provided that the tax is approved by at least two-thirds of voters in the district. Senior citizens may be exempted from the additional tax burden. Proceeds from the tax may be used for services and facilities.

California is trying to meet its school construction needs through a combination of state and local funding methods, as well as innovative strategies such as developer fees. Local school districts in California can impose fees on new residential development to help pay for the cost of building the schools that will serve the new residents.

Las Vegas/Clark County, Nevada

Measured in terms of the number of new students, the Las Vegas/Clark County school system is the fourth-fastest growing school district in the country, with almost 91,000 new students between 1987 and 1997. That translates into a 91 percent increase – the fastest growth rate of any school district with over 100,000 students.[24] The pressure on schools is a reflection of the tremendous growth of the city itself:

> Two hundred new residents arrive in Las Vegas every day; a house is built every 15 minutes. Last year alone, the city issued 7,700 residential building permits, plus permits for $200 million worth of commercial construction – enough to build a good-sized Midwestern county seat from scratch.[25]

Las Vegas voters have approved over $5 billion in school construction bonds since 1988.

But unlike Miami, Las Vegas is pulling together to try to meet its school-construction needs – though, of course, it hasn't always been easy. Nine new schools were scheduled to open in August 1999 – five elementary schools, one middle school, and three high schools. Clark County taxpayers have approved four school bond issues since 1988: $600 million in 1988, $605 million in 1994, $643 million in 1996, and $3.5 billion in November 1998. These two bond issues are expected to finance the construction of 41 new schools. In fact, since the 1994-95 school year, 32 new schools have opened in Clark County.[26] The most recent bond issue is expected to continue the building boom by providing enough money to construct 88 new schools.[27]

The 1994 and 1996 bond issues were pushed through in large part by the business community, which pushed hard to overcome voter reluctance to the huge spending packages. Developers, casinos, telephone and power companies, banks and hotels contributed a total of $750,000 in cash to convince voters to vote for the bonds when the referendums came up. In-kind contributions added hundreds of thousands of additional dollars to the campaign. For example, the Hughes Corp. contributed a campaign headquarters and paid for public service announcements on the issue. Business executives went on the lecture circuit in support of the initiative, and one car dealership even devoted his marquee to advertising the cause. Gas stations were recruited to hang banners urging a pro-bond vote, and students were organized to speak with senior citizens about the need for new schools. Parents, scout troops, and high school track teams fanned out on "Doorknobber Weekend," hanging 200,000 brochures on people's front doors. The campaign was successful.

Business leaders in Las Vegas — realizing that they needed good schools to have qualified workers in the future — helped to build support for school construction bonds by donating both money and time to the cause. Their backing persuaded many voters to overcome their reluctance to approve the huge spending packages.

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For the 1994 bond referendum, 24 of the county's top executives formed a political action committee. These companies stressed that they have a major stake in the school district's performance because they believe Clark County businesses need better access to a well-educated workforce. Joyce Halderman, coordinator of the district's campaign, said the strategy is to "admit mistakes, toss negatives back to the community by asking for help, and keep the message focused on kids and crowding." The local organizing campaign even included television ads designed to sell the public on the need for the bonds. One commercial showed children playing musical chairs around a cluster of school desks. As "Pop Goes the Weasel" blared, more and more kids joined the group, climbing over each other just to get a seat.[28]

Funding proposals for schools – and other infrastructure needs in the rapidly growing county – may begin to become more controversial in the coming years. Former Las Vegas Mayor Jan Laverty Jones and state Sen. Dina Titus are beginning to push the notion that developers should pay "impact fees" and share the costs of the basic infrastructure that must be put in place to accommodate the population boom. While these fees could provide a windfall to the school district, winning such concessions will inevitably come at the end of a protracted fight.[29]

Detroit, Michigan

While the Detroit school district is not among the nation's fastest growing systems, it does illustrate an important point: even older Midwestern cities – those generally lumped together under the title of the "Rust Belt" – face significant overcrowding and capital needs. Aging buildings and changing student populations mean that even cities that aren't growing quickly may face serious capital improvement problems in their schools.

Detroit appeared to be on the right track in 1994 when voters approved a $1.5 billion bond issue for school construction and renovation. The size of the bond issue was at the time the largest in U.S. history, surpassing the $980 million bond issue approved by Dade County, Florida, voters in 1988. The bond was intended to fund renovations and technology upgrades at all 263 Detroit schools, as well as constructing at least another dozen new schools over the course of a decade.

But as late as 1997, no work had begun on the construction campaign. "It's a joke," said Marie Thornton, a parent activist and former member of the public commission appointed to oversee the construction initiative. "We don't have any buildings, we don't have any workmen, you don't see a brick laid."[30]

While the Detroit school district is not among the nation's fastest growing systems, it does illustrate an important point: even older Midwestern cities – those generally lumped together under the title of the "Rust Belt" – face significant overcrowding and capital needs. Aging buildings and changing student populations mean that even cities that aren't growing quickly may face serious capital improvement problems in their schools.

Since that time, Detroit has begun to get its capital program on track. Detroit Schools CEO David Adamany, in a "Preliminary School Improvement Plan" dated July 1999, called for a rethinking of the city's bond program:

> The Detroit Public Schools should review and revise the bond issue program to take into account major considerations that were not fully considered in the original bond plans. These considerations include (1) population and enrollment trends in Detroit, (2) the City of Detroit's plans for expansion of residential development in certain parts of the City as well as plans to diminish residential living in areas designated for industrial and commercial activity, (3) construction of new facilities too replace, rather than to repair older buildings . . .

The plan also calls on the school district to establish prototype schools to reduce costs, develop better construction standards and uniform security infrastructure, and establish a consistent program for improving technology infrastructure.[31]

The School Improvement Plan concludes that in general, "the bond program authorized by the people of Detroit has not been effectively implemented." Of the $1.5 billion authorization, only $310 million in bonds had been issued as of July 1999. Approximately $170 million of that has been spent or committed, and another $50 million in expenditures has been authorized for emergency repairs during summer 1999. "The district therefore has substantial bond proceeds . . . still available and has very significant additional bonding capacity to address the serious facilities conditions in the Detroit schools."[32]

While the Detroit schools have begun to get a handle on long-overdue basic maintenance, little has been done to ease overcrowding. About 4,400 students attend 70 overcrowded schools in the city, but 186 are operating below their capacity. These underutilized schools have an excess capacity of 44,100 seats. The plan calls busing a "feasible temporary alternative," but is quick to say that such a policy "does not constitute a good long-term educational solution." The school district is considering closing some school buildings and finding ways to make better use of available classroom space.[33]

Detroit's school improvement program has been slow to get off the ground. Of the $1.5 billion in school construction and repair funds authorized by voters, only $310 million in bonds had been issued as of July 1999. Just $170 million had actually been spent on school improvement projects.

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States, Municipalities Seek Out Innovative Funding

The Federal Government cannot – and should not – pick up the entire tab for school construction and repair. School finance has traditionally been the territory of local and state governments, and they should continue to play a primary role in funding capital improvements. In the absence of federal support for school buildings, many state and municipal governments have stretched their limits and devised innovative financing techniques that, when paired with federal construction dollars, may go a long way toward overcoming their massive funding shortfall.

The previous section looked at how some of the larger school districts are finding ways to finance their school capital needs. But smaller school districts often have pressing capital needs as well, and even in these communities the cost of building and modernizing schools has stretched into the tens of millions of dollars. Faced with a smaller tax base – and often saddled with rapid population growth that presents a number of infrastructure problems that stretch beyond just school construction – these municipalities often have a harder time raising money through conventional methods such as local general obligation bond issues. Vast disparities in property values between wealthy and poor districts often make it difficult or impossible to pass bond issues. Phil Fox, associate director of the Colorado Association of School Executives, said that weak tax bases keep many school districts from even considering a bond-issue referendum. "most of them know damn well they can't pass a bond issue," Fox says, "and they don't even bother to have them."[34]

Meeting the needs of these communities often requires coordinated issues at the state or county level. The remainder of this chapter includes several examples of how smaller school districts have sought to address their funding needs.

Broward County, Florida: *State Funding Comes Through*

By comparison with a city such as New York or Chicago, Broward County's 225,000 students seems relatively small. But the county – which includes Fort Lauderdale – is the nation's fifth fastest-growing school district, having added more than 87,000 students to its ranks between 1987 and 1997 – almost 30,000 more than Chicago added during that same period.[35] This 64 percent increase in student enrollment has earned Broward County's school funding woes national attention, and forced the district to aggressively pursue sources of funds to pay for its school capital needs.

In the absence of federal support for school buildings, many state and municipal governments have stretched their limits and devised innovative financing techniques that, when paired with federal construction dollars, may go a long way toward overcoming their massive funding shortfall.

Florida's 1998 legislative session ended with some creative strategies for helping Broward County public schools reap some of the financial benefits of a strong economy and a successful lawsuit against the tobacco industry. As a result of a special legislative session in November 1997 and the regular 1998 legislative session, Broward County schools will receive more than $361 million in additional school funding. That includes about $282 million earmarked for new school construction and overcrowding relief, and another $79 million to support future enrollment increases, salary issues, and program improvements. The increase was made possible by a successful $11.4 billion lawsuit against the tobacco industry. Some of these dollars will be used to pay for health services normally supported by state general revenues. Those funds can, in turn, be released to address other state needs, including education.

Broward County, Florida, took advantage of its settlement with the tobacco industry to free up funds for school construction.

Georgia:
Choosing Sales Taxes for Schools

In 1996, Georgia voters approved a ballot initiative that gives school districts the authority to collect an additional one-cent state sales tax to help fund school construction. The program – known as the Educational Local Option Sales Tax – passed with the overwhelming support of 90 percent of Georgia voters. Each school system must then ask voters whether to put the tax in place. So far, 144 of Georgia' 180 school districts have put the measure to a vote, and 129 of them have been successful.[36]

Georgia is seventh among the state with the fastest growing elementary and secondary school enrollments, and includes three of the nation's 25 fastest-growing school districts.[37] This enrollment explosion may leave the state with a school construction bill of up to $4 billion, according to some estimates. Backers of the sales-tax program cite several advantages over a school-funding system that relies solely on property taxes, as most states do. For one, the sales tax is spread out over more people than the property tax. In addition, sales tax revenues are collected monthly, while districts must wait at least until the end of the year before they see their share of the property tax bill. This monthly collection can create a "pay-as-you-go" system for paying for some school construction needs, limiting the costly and time-consuming process of issuing bonds. That means fewer interest payment or expensive fees to bond underwriters, lawyers, and financiers. Still, critics say, sales tax revenues are more volatile than property tax receipts, which makes sales taxes a more uncertain way of funding the state's schools.[38]

In 1996, Georgia voters approved a ballot initiative that gives school districts the authority to collect an additional one-cent state sales tax to help fund school construction. Since then, citizens in 70 percent of the state's school districts have voted to use the tax to help fund their school construction programs.

Charlotte-Mecklenburg, North Carolina
Building Support for Bonds

Like many school districts, officials in Charlotte, North Carolina, were concerned about winning public support for a major school construction bond. The district grew by 28 percent between 1987 and 1997, resulting in an additional 21,000 students entering the school system.[39] But despite the undeniable need for more school capital funds, the first attempt at passing a $304 million bond issue in 1995 was rejected by voters. School officials regrouped, scaled back the size of the proposal to $217 million, and began a series of community meetings designed to cultivate support. Each school received a list of projects planned for the school – provided that the bond issue passed. The commitment to specific projects helped build a sense of trust within the community that was enough to pass the scaled-back bond issue later that year. Since then, Charlotte-Mecklenburg has been successful in passing two additional bonds in 1996 and 1997 totaling $118 million. This new funding will help the district renovate and repair 69 schools and construct 10 new school buildings.[40]

Many local school districts are working hard to find new and better ways to fund school construction and repair, but the size and scope of the problem often is too much for even the largest and most financially sound school systems. In smaller or less wealthy districts, the problems are often even more severe.

Despite these challenges, spending on school capital improvements has reached record heights. But state and local solutions have so far been unmatched by ballooning school enrollments, changing ideas about what types of buildings are best for learning, and long-overdue repairs that are making many school buildings unsafe and unusable. The final section of this report will look at what the federal government can do to help rebuild America's schools.

End Notes

1. The Senators who requested the report were Carol Moseley-Braun (D-IL), Paul Simon (D-IL), Edward Kennedy (D-MA), Paul Wellstone (D-MN), and Claiborne Pell (D-X).

2. United States General Accounting Office, *School Facilities: Condition of America's Schools*, February 1995, p2.

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4. *Ibid.*, p16.

5. *Ibid.*, p18.

6. Those reports are: *School Facilities: Condition of America's Schools* (GAO/HEHS-95-61, Feb. 1, 1995); *School Facilities: America's Schools Not Designed or Equipped for the 21st Century* (GAO/HEHS-95-95, April 4, 1995); *Technology: America's Schools Not Designed or Equipped for the 21st Century* (GAO/T-HEHS-95-127, April 4, 1995); *School Facilities: States' Financial and Technical Support Varies* (GAO/HEHS-96-27, Nov. 28, 1995); *School Facilities: Accessibility for the Disabled Still an Issue* (GAO/HEHS-96-73, Dec. 29, 1995); *School Facilities: America's Schools Report Differing Conditions* (GAO/HEHS-96-103, June 12, 1996); and *School Facilities: Profiles of School Condition by State* (GAO/HEHS-96-148, June 24, 1996).

7. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, August 19, 1999.

8. *Ibid.*, Table 6.

9. Joe Agron, "Healthy Progress: 25th Annual Official Education Construction Report," *American School & University*, May 1999, pp. 48.

10. *Ibid.*, pp. 40-41.

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12. Citizens Budget Commission, *The State of Municipal Services in the 1990s: Crowding Building Conditions, and Staffing in New York City Public Schools*, September 2, 1997, p7.

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16. Citizens Budget Commission, *School Buildings for the Next Century*, September 1996, p5.

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18. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Table 5.

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20. Drew Lindsay, "$1 billion School-Building Program Cannot Keep Up With Dade Students," *Education Week*, November 16, 1994.

21. Kerry White, "Florida's School-Crowding Woes Offer Fodder for Ongoing Debate," *Education Week*, September 24, 1997.

22. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Table 5.

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33. *Ibid.*

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35. U.S. Dept. of Education, *The Baby Boom Echo: No End in Sight*, Table 5.

36. Linda Jacobson, "Georgia Schools Tap New Source for Construction," *Education Week*, June 3, 1998, pp13-14.

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40. Dana Spoor, "Forming Bonds," *American School & University*, October 1998, p50.

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